

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1798.—Vol. XL.

LONDON, SATURDAY, FEBRUARY 5, 1870.

(WITH SUPPLEMENT) {STAMPED .. SIXPENCE, UNSTAMPED .. FIVEPENCE

MR. JAMES CROFTS, STOCK AND SHAREBROKER,
No. 1, FINCH LANE, CORNHILL.
(ESTABLISHED 1842.)

Mr. Crofts transacts business in the way of PURCHASE or SALE of every description of stocks, but particularly BRITISH MINES, at net prices. All orders must be accompanied by the usual security, and advice given as to the nature and eligibility of INVESTMENTS when required.

HOLDERS of mining shares DIFFICULT OF SALE in the open market may find purchasers for the same through Mr. Crofts' agency. Also parties requiring advice how to act in the disposal or abandonment of doubtful mining stocks may profitably avail of Mr. Crofts' long experience on the market in all cases of doubt or difficulty, legal or otherwise.

The purchase of GREAT ROYALTON shares is specially recommended for a great rise.

VIRTUOUS LADY.—SPECIAL BUSINESS in these shares.

Bankers: Metropolitan Bank.

MR. W. H. BUMPUS, STOCK AND SHAREDEALER,
44, THREADENE STREET, LONDON, E.C., has FOR SALE the following SHARES, free of commission:—

50 Anglo-Argentine, 19s.	10 East Caradon, £23½.	35 South Herodfoot, 10s.
20 Asbestos, £15½.	20 E. Grenville, £24½.	60 Taquaril, 18s.
55 Anglo-Brazil, 11s. 6d.	100 Frontino, 18s. 9d.	3 W. Chiverton, £56½.
15 Australian United, Gold, 8s. 9d. prem.	10 Frank Mills, £28.	60 W. Drake Walls, 3s. 3d.
20 Bronfloy, £4½.	60 General Brazil, 16s. 6d.	60 West Maria, £28. 9d.
45 Calbeck Fells, 31s.	10 Great Laxey, £16½.	25 West Caradon, 21s.
75 Carn Camborne, 11s.	60 Gt. No. Laxey, 18s.	5 Wt. Rose Down, £25.
130 Cuddra (all calls pd.), 1s. 9d.	25 Great Retallack, 17s. 6d.	30 W. Godolphin, 17s. 6d.
30 Chontales, 22s. 3d.	5 Great Vor, £12½.	75 West Prince of Wales, 10s. 6d.
15 Don Pedro, £3 s. 9 pm.	10 Marke Valley, £7½.	10 Wh. Kitty (St. Agnes), £5 11s. 3d.
60 Drake Walls, 19s. 9d.	45 No. Trekerby, 13s. 9d.	30 Wh. Crebhor, 16s. 6d.
40 East Seton, 21s.	10 Pacific, £11½.	60 Yorke Penin., 10s. 6d.
15 E. Rosewarne, 2s. 9d.	50 Pastarena, 29s.	25 Yudanamuta, 23s. 9d.
	40 Prince of Wales, 21s.	30 Conduirrow, 28s.

MR. W. L. LILLIAM WARD,
95, BISHOPSGATE STREET WITHIN, LONDON, E.C.

JOHN RISLEY, (SWORN) STOCK AND SHAREBROKER,
45, THREADENE STREET, LONDON, E.C.
Bankers: London and Westminster, Lothbury.

MR. Y. CHRISTIAN, STOCK AND SHAREDEALER,
11, ROYAL EXCHANGE, E.C.
Bankers: Bank of England.

MR. T. A. MUNDY, STOCK AND SHAREDEALER,
39, BISHOPSGATE STREET WITHIN, E.C.
Bankers: City Bank.

MR. JOHN MOSS, STOCK AND SHAREDEALER,
ST. MICHAEL'S CHAMBERS, 42, CORNHILL, E.C.
Bankers: City Bank, Finch Lane, E.C.

SILK AND CO., HOME AND COLONIAL AGENTS,
STOCK AND SHAREBROKERS
CHIEF OFFICES,—32, REGENT STREET, PICCADILLY CIRCUS, W.

We are prepared to negotiate the Purchase or Sale of Stocks and Shares in Consols, Railways, Insurance, Banks, Gas, Mining, and other Financial Companies. BUSINESS in the following shares:—

Asbestos.	Cebu.	South Frances.
Bronfloy.	Don Pedro.	South Conduirrow.
Bwch Consols.	E. Grenville.	Van.
Brynmyst.	Great Laxey.	West Maria.
Burford United.	Kitty (St. Agnes).	Tan-yr-Alit.
Cardigan Bay Consols.	Nantes Consols.	Wheal Crebhor.
Chiverton Moor.	Prince of Wales.	

Crown Quarry. Cwmshol. Morben. Apperley.

CARDIGAN BAY CONSOLS.—As we predicted, these shares are going up rapidly. See report in this day's Journal. FRANK LILMER, Secretary.

Twenty-five Years' Experience.

MR. F. W. MANSELL, STOCK AND SHAREDEALER,
1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C., has the following SHARES FOR SALE, for cash or account, at net prices:—

100 Anglo-Brazilian, 10s.	5 East Basset, 42s. 6d.	1 New Seton, £40.
40 Australian United, 12s. 6d. prem.	40 East Seton, 20s.	10 Prince of Wales, 20s.
20 Anglo-Argent., 16s. 3d.	15 East Grenville, 40s.	10 Retallack, 10s.
10 Bronfloy, £4.	100 Frontino, 18s.	3 Stray Park, £5.
75 Chontales, 18s. 9d.	50 Gen. Brazilian, 14s.	25 Sub. Conduirrow, 25s.
10 Carn Camborne, 10s. 6d.	5 Gt. Wh. Vor, £13½.	5 Ro. Herodfoot, 20s.
20 Chiverton Moor, £4½.	5 Great Laxey, £16½.	50 Sao Vicente, 6s. 3d. dis.
25 Copiapo, £2½.	5 Herodfoot, £4½.	10 Van Consols, 10s.
5 Cape Copper, £10½.	50 Hington Down, 17s.	10 Wb. Trellawny, 12s. 6d.
50 Don Pedro, £3 18s.	50 Kapunda, 4s. 3d.	20 West Maria and Fortescue, £2 11s. 3d.
25 Drake Walls, 19s.	50 Lusitanian, 4s. 3d.	5 Wb. Mary Ann, £13.
15 East Caradon, £2½.	35 Mandillo, £2½.	100 W. Prince of Wales, 2s.
10 East Lovell, £23½.	5 Marke Valley, £7.	
	50 No. Trekerby, 13s. 9d.	

The main in the several Welsh mines having only partially subsided, the public would do well to take advantage of the present demand before the shares become unsaleable, which is sure to follow.

Bankers: London Joint-Stock Bank.

MR. EDWARD JONES, 19, GREAT ST. HELEN'S,
LONDON, E.C., STOCK AND SHAREDEALER.
Business transacted for cash or the fortnightly settlement in all Stocks and Shares; and Special Business in Providence, Great Vor, West Chiverton, Badnick Consols, East Lovell, Devon Great Consols, East Basset Hill, Frontino and Bolivia, Pastarena United, Chontales, and Australian United.

Money advanced on marketable shares to any amount.

MR. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S,
BISHOPSGATE STREET, LONDON, E.C. (Established 18 years), has FOR SALE the FOLLOWING SHARES, at net prices:—

50 Anglo-Austral., 14s. 9d.	20 Frontino, 18s. 9d.	20 Pacific, £1 8s. 9d. pm.
15 Asbestos, £15.	20 Frank Mills, £28.	50 Port Phillip, 18s. 9d.
25 Australian United, 8s. 9d. prem.	10 Great Rock, £3½.	20 So. Herodfoot, 17s. 6d.
50 Anglo-Argent., 16s. 3d.	40 Gt. Retallack, 7s. 3d.	50 So. Conduirrow, 22s. 9d.
10 Bwch Cons., £3 12s. 9d.	40 Gt. No. Laxey, 18s. 9d.	30 So. Darren, 39s.
25 Bronfloy, £4½.	5 Great Laxey, £16½.	5 St. John del Rey, £34½.
20 Brynmyst, 21s. 3d.	20 Gt. Western, 34s. 9d.	10 Tan-yr-Alit, £10½.
20 Carn Camborne, 11s. 3d.	20 Gen. Brazilian, 14s. 9d.	1 Van, £7½.
40 Calbeck Fells, 31s.	5 Gt. Caradon, 13s. 9d.	125 Wt. of Prince Wales, 1s. 3d.
100 Cuddra, 2s.	20 Hammett, 1s. 3d.	60 Wheal Crebhor, 16s. 6d.
40 Chontales, 21s. 9d.	20 Hington, 20s.	5 Wheal Seton, £23½.
10 Chiverton, £3 12s.	5 Mines Purchase, 4s. 9d.	10 Wheal Ury, £2 18s. 9d.
15 Chiv. Moor, 18s. 9d.	5 Mining Assoc., 13s. 9d.	20 West Maria, 49s. 6d.
25 Drake Walls, 19s. 9d.	5 Marke Valley, £7 1s.	5 Wt. Chiverton, £26½.
10 Don Pedro, £3 s. 9 pm.	20 North Trekerby, 14s.	10 Van Consols, £28. 9d.
2 East Pool, £7 3s. 9d.	30 North Pool, 24s. 6d.	10 W. Kitty (St. Agnes), £5 11s. 3d.
2 East Lovell, £27.	1 Providence, £23½.	20 West Caradon, 18s.
25 East Seton, 19s. 9d.	100 Prince Wales, 19s. 6d.	

W. M. is prepared to sell the whole of the above shares to any responsible purchaser. HAMMETT shares should be bought.

W. M. is instructed to sell some shares in a promising silver-lead mine, situated in one of the best mineral districts of Wales, which are likely to command a high premium; also, an eighth part of a valuable colliery, producing the best description of coal, upon very advantageous terms.

MR. GEORGE BUDGE, STOCK AND SHAREDEALER,
No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 21 years), is a SELLER at net prices of:—

50 Bradstreet Consols, 1 Devon Great Consols, £12½; 2 Miners, £167 ex div;	
1 Deptford Bridge, £91; 1 South Caradon, £210; 2 Lisburne, £160½; 20 North Levant; 20 Wheal Trellawny, 16s. 6d.; 200 Redmoor; 50 Asbestos; 15 Tan-yr-Alit; 25 Prince of Wales, 22s.; 50 Bedford Consols; 3 Great Laxey, £16½; 5 Great Rock; 60 Wheal Crebhor, 12s. 6d.; 100 East New Wheal Lovell; 5 Cape Copper, £29½ prem.; 70 Alamillos, £2½; 100 Anglo-Brazilian, 10s.; 5 St. John del Rey.	

Mr. Budge recommends the purchase of East Darren, Lisburne, and Miners shares at present low prices, all these mines have good reserves, paying regular dividend. He also strongly advises investors to secure an interest in Bradstreet Consols. The important discoveries already made, and the good monthly profits, will shortly place this mine in the Dividend List; there are ample reserves to continue its present prosperity.

WANTED TO PURCHASE.—50 Charing-Cross Hotel, and 5 East Darren.

ANNUAL REVIEW OF CORNISH AND DEVON MINES FOR 1869.

PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST—SYNOPSIS OF CORNISH AND DEVON MINES," of yesterday, No. 670, Vol. XII., price 6d. each copy, contains the continuation of his Annual Review of Cornish and Devon Mines for 1869.

It will be continued weekly, and will contain Important Remarks on the Past, Present, and Future of nearly all the leading Dividend and Progressive Tin, Copper, and Lead Mines, pointing out those mines most desirable to speculate or invest in at the present market price.

CORNISH AND WELSH MINES—FOREIGN GOLD MINES.

TO SHAREHOLDERS AND OTHERS.

PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST—SYNOPSIS OF CORNISH AND DEVON MINES," of Friday, Feb. 4, No. 670, Vol. XII., price 6d. each copy, forwarded on application, contains information on the following mines:—

Great Rock.	New Wheal Lovell.	Devon Great Consols.
Bwch Consols.	Frontino.	West Caradon.
Asbestos.	Don Pedro.	North Wheal Crofty.
Van Consols.	Pastarena.	East Wheal Seton.
Wheal Trellawny.	Bronfloy.	Australian United.
Great Wheal Lovell.	Van.	Anglo-Brazilian.
Great Western.	Tan-yr-Alit.	

With a Special Article on Welsh Lead Mines, Advance in Copper Standard, &c.

INVESTMENT OR SPECULATION.—A SELECTED LIST OF RAILWAYS, BANKS, MINES, COLONIAL SECURITIES, FOREIGN GOVERNMENT BONDS, &c., forwarded to bona fide investors on application, in addition to the high rate of interest many of the above are paying, there is now every probability of a great rise in market value.

PETER WATSON, STOCK AND SHAREDEALER, 79, OLD BROAD STREET, LONDON.

(three doors only from Hercules-passage, entrance to the Stock Exchange).

Twenty-four years' experience.

(Two in Cornwall and Twenty-two in London.)

Bankers: The Alliance Bank, and the Union Bank of London.

References given and required (when necessary) in all the principal towns of the United Kingdom.

THE LONDON DAILY RECORD—STOCK AND SHARE LIST.

Published every evening at 5 o'clock.

Forwarded by same night's mail to subscribers.

Entered at Stationers' Hall, July, 1866.

Contains the latest closing prices of any share-list published; showing the rise and fall in railways, banks, foreign stocks, colonial securities, American securities, foreign railways; telegraphic, insurance, steamship, and miscellaneous shares; Cornish and Welsh mines, foreign gold mines, &c.

With remarks on the daily operations, and advice as to purchases or sales.

Annual subscription, £11s.; by post, £2 2s.; monthly subscription by post, 4s.; single copy, 1d.; by post, 2d.

Published by P. WATSON, Stock and Sharedealer, 79, Old Broad-street, London, E.C.

MR. EDWARD COOKE, STOCK AND MINING SHAREDEALER, 79, OLD BROAD STREET (and Mining Exchange), LONDON, E.C.

TO SHAREHOLDERS AND OTHERS INTERESTED IN CALBECK FELS MINE.—A printed report of this important mine may be had on application.

PACIFIC MINING COMPANY.—Business in these shares at close market prices. Particulars of the properties belonging to this company may be obtained on application.

Bankers: Alliance Bank.

MR. W. H. CUEL, No. 42, CORNHILL, LONDON, E.C.

MR. T. ROSEWARNE, 81, OLD BROAD STREET, LONDON, E.C., DEALER in all the LEADING SHARES upon the EXCHANGE.

T. R. has business as BUYER or SELLER in the following mines, at close market prices:—

Bedford United.	Calbeck Fells.	Great Vor.
Bedford Consols.	Chontales.	Pacific.
Bronfloy.	Frank Mills.	Prince of Wales.

T. R. should be consulted as to the purchase of East Lovell and West Maria and Fortescue shares.

Money advanced to any extent on good mining shares.

Office hours Ten to Four. Bankers: Bank of England.

BARTLETT AND CHAPMAN, STOCK AND SHARE DEALERS, 36, CORNHILL, LONDON, E.C.

THE INVESTMENT CIRCULAR, published on the first Wednesday in each month. Subscription, 6s. a year, including postage; a single copy, 6d.

THE HANDY-BOOK FOR INVESTORS, comprising a sketch of the Rise, Progress, and Present Character of every species of Investment, British, Colonial, and Foreign; including an estimate of their comparative safety and profit. Bound in cloth, 10s. 6d.

BRITISH MINES AND MINING, comprising a comparison of Mining with other Investments; a description of the Mining Districts of the United Kingdom, and a detailed account of the Tin, Copper, Lead, and other Mines in Cornwall, Devon, Salop, Wales, and the Isle of Man; with a complete Glossary of Mining Terms. Bound in cloth, 2s. 6d.

Cheques to be crossed London and Westminster or Alliance Bank.

WALTER TREGELLAS, 122, BISHOPSGATE STREET WITHIN, LONDON, E.C., DEALS in all descriptions of ENGLISH and FOREIGN SECURITIES, either for immediate cash or the fortnightly settlement.

W. T. is always prepared to do business in the shares of the Brazilian Gold Mines, which, from long experience, he is well acquainted with.

Taquaril shares are a first-class investment; also Eclipse, California.

MR. J. H. COCK, STOCK AND MINING SHAREDEALER, 74, OLD BROAD STREET, LONDON, E.C.

Fifteen years' experience in Cornwall and London.

BUYER or SELLER of Pacific, Chontales, Frontino, and most of the leading mines, at close prices. Shares difficult of sale negotiated on the most favourable terms.

J. H. C. having received reliable information respecting HAMMETT MINE, can, with confidence, strongly recommend an immediate purchase of the shares at present price.

MR. HENRY MANSELL, STOCK AND SHAREDEALER, 1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C.

SALE, at net prices, for cash, the following shares:—

100 South Conduirrow, 24s.	50 No. Trekerby, 14s.	50 Chontales, £1 1s. 3d.
20 East Caradon, £6 9 s.	100 Wt. Godolphin, 13s. 6d.	10 Gt. South Chiverton.
20 Don Pedro, £3 9 s. 9 pm.	50 Holmbush and Kelly.	25 South Merilyn.
100 Excoislor.	Bray, 5s.	1 Devon Consols, £190
20 Lilywernog, 38s.	100 Princess of Wales, 7s.	20 Pastarena, £1 8s. 9d.
20 Aberdunant (fully paid), £5.	25 West Prince of Wales, 2s. 6d.	175 Lisburne Cons. (offer wanted.)
100 Van United, 19s. (£1 paid).	30 Nantes Cons. (fully paid), 21s.	50 Prince of Wales, 22s.
5 Great Laxey, £16½.	20 West Maria and Fortescue, 49s. 6d.	5 Wt. Chiverton, £26½.
10 Pacific, £1 18s. 9d. pm.	10 Great Vor, £19½.	20 Redmoor, 18s.

EXCOISLOR TIN AND COPPER MINE.—H. M. advises the immediate purchase of these shares at present low prices. The deep adit is fast approaching the lode on the back where the rich tin was discovered. Specimens of same can be seen at the above address.

References exchanged.

Bankers: London Joint-Stock Bank.

INVESTMENT, LOAN, AND BANK AGENCY.

Established 1839.

Capitalists may effect Investments through this Agency, with every advantage, in Foreign Stocks, Colonial Government Bonds, Railway, Bank, Telegraph, Mining, and other Shares. The most reliable information afforded, and none but bona fide marketable securities, which will return a good profit without risk, are recommended.

LOANS granted for one year, or any shorter period, on all Stock Exchange Securities.

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M. O. CHARLES THOMAS,
MINING AGENT, AND GENERAL SHAREDEALER,
3, GREAT ST. HELEN'S, LONDON, E.C.

SAFE PROFITABLE INVESTMENTS.

SHARP'S INVESTMENT CIRCULAR.—See February Number. Ready, 1s., in 12 pages.

It contains every information, with latest prices and Dividends, &c., &c., upon:—
British Mines. British Railways. Foreign Stocks, Bonds.
Foreign Mines. Foreign Railways. Water Works.
Gas Companies. Railway Debentures. Docks.
Telegraph Companies. Canal Companies. Land Companies.
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Established 1852.] Bankers: London and Westminster, Lothbury, E.C.

NOTICE TO SHAREHOLDERS.

WANTED TO PURCHASE, the FOLLOWING SHARES:—

2 Dolcoath.	16 Trumpet Consols.	4 Providence.
200 Great Rock.	300 Bronfloy.	5 Wheal Jane.
20 West Chiverton	10 Van.	150 Van Consols.
4 Kitty (Lelant)	100 North Lovell.	500 Great Caradon.
200 East Chiverton.	50 Asheton.	100 Tan-yr-Alit.

Sellers must state number and lowest price for cash to:—

Messrs. SHARP AND CO., STOCK AND SHARE DEALERS, 33, POULTRY, LONDON, E.C.

Established 1852.] Bankers: London and Westminster, Lothbury, E.C.

SHARP'S INVESTMENT CIRCULAR,

Issued Monthly, post free, 1s., contains RELIABLE INFORMATION upon the FOLLOWING and other MINES:—

Asheton, "Limited."	Great Rock, "Limited"	Trumpet Consols.
Bronfloy, "Limited."	Great Wheal Vor.	Tan-yr-Alit, "Limited"
Bedford.	Herodfoot.	Van, "Limited."
Devon Great Consols.	Marke Valley.	Van Consols.
Dolcoath.	North Lovell.	West Chiverton.
Ding Dong.	Nangles.	West Wheal Seton.
East Chiverton.	Penhalls.	Wheal Mary Ann.
East Pool.	Providence.	Wheal Jane.
East Wheal Lovell.	Spearn Moor.	Wheal Kitty (Lelant).
Great Laxey.	South Caradon.	Wheal Kitty (St Agnes).
	Tincroft.	

Messrs. SHARP AND CO., STOCK AND SHARE DEALERS, 33, POULTRY, LONDON, E.C.

Established 1852.] Bankers: London and Westminster, Lothbury, E.C.

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26, MARTIN'S LANE, CANNON STREET, E. C.

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SAFETY FUSE MANUFACTURERS, REDRUTH, CORNWALL; AND BRYMBO, NEAR WREXHAM.

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SELF HELP TO PATENT LAW;

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Business operations in Mining Shares effected at close market rates.

Reliable information afforded upon most of the Welsh lead mines.

Daily Price Lists to applicants.

Mr. THOMAS has SPECIAL BUSINESS in the shares of the Holmbush and Kelly Bray United Mines Company.

LEAD MINING IN WALES.—

Owing to the unprecedented success of the VAN MINE, near Llanidloes, the shares of which (£4 5s. paid) are now at £75, and the great advance in the value of TAN-yr-ALIT, ASHETON, and several other Welsh Lead Mines, there exists an extraordinary demand for such investments, which, there is every reason to believe, will greatly increase. That the lead mines of Wales are now commanding great attention is not to be wondered at, it being no other than their just due—their undoubted great resources, positional advantages, and facilities for working, ensuring a much higher percentage of profit than is to be realised by the tin and copper mines of Cornwall.

Looking at Welsh Mining Enterprise, the conclusion is unavoidable that it cannot fail to be pre-eminently successful; at the same time, the speculative character of all mining renders the selection of such investments somewhat hazardous, and, therefore, investors should be guided by parties with practical knowledge, and who are to be relied on as being trustworthy.

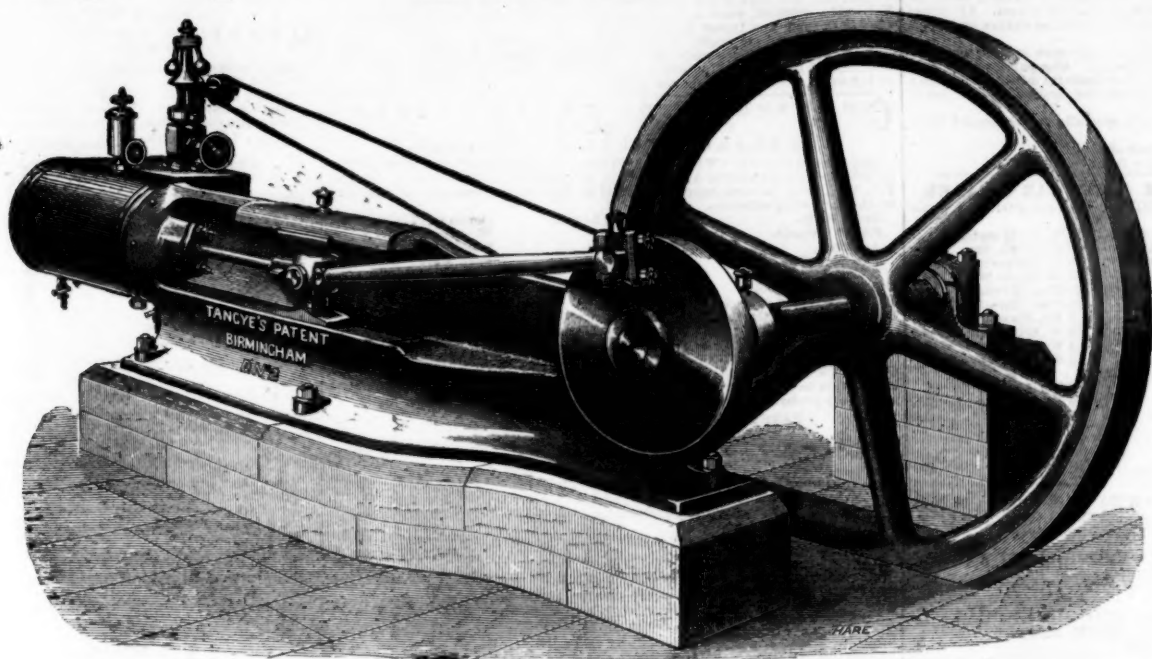
The undersigned, having devoted many years to the attainment of the practical knowledge he possesses of the mineral mines of Great Britain, and being more particularly acquainted with the lead mines of Wales, is prepared to offer reliable advice thereon, and will at all times do his best for those who may favour him with their orders.

TANGYE BROTHERS AND HOLMAN,

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CORNWALL WORKS (TANGYE BROTHERS), BIRMINGHAM.

TANGYE'S Patent High Speed Regulating Governor Steam Engines.



NEW DESIGN.
FIRST-CLASS WORK.
SIMPLE. STRONG.
GUARANTEED.

Number of engine	A	B	C	D	E	G	H	J
Nominal horse-power	One	Two	Three	Four	Six	Eight	Ten	Twelve
Price of Engine, with Governor and Feed Pump	£20	£27 10	£35	£40	£60	£80	£100	£120
Price of Engine and Boiler, with Fittings	£43	£56	£84	£96	£135	£168	£205	£235
Diameter of Steam Cylinders, in inches	3	4	5	6	8	9	10	12
Length of Stroke, in inches	6	8	10	12	16	18	20	24

EVERY ENGINE
WELL TESTED
BEFORE LEAVING
THE WORKS.

THE "SPECIAL" STEAM PUMPS.

NOTE.

Each one is carefully tested with Steam and Water before leaving the Manufacturer.

In case of special quotations, the following particulars are required—viz.:

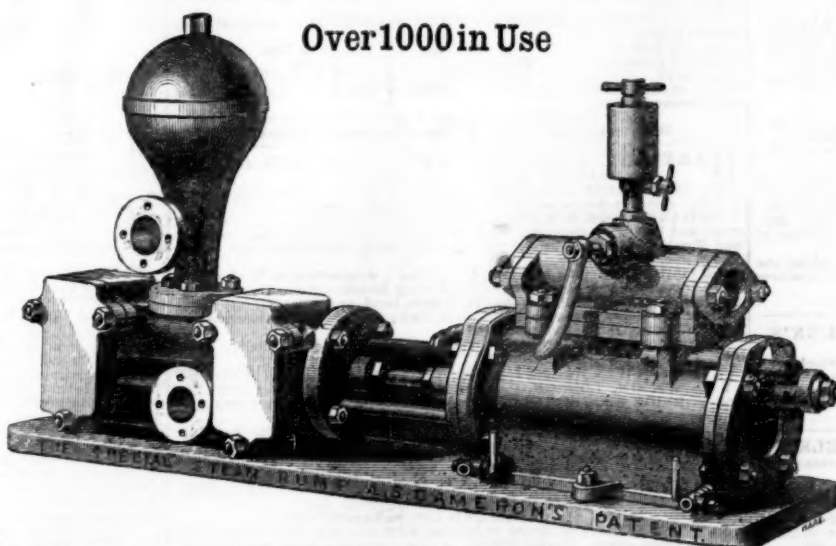
Pressure of Steam in Boiler.

The number of Gallons required to be lifted in a given time,

And the height of Lift from level of water to the point of delivery.

In ordering, state the purpose for which the pump is required, to ensure suitable valves being sent.

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NOTE.

Requires NO Shafting, Gearing, Riggers, or Belts.

All Double-Acting.

Works at any Speed, and any Pressure of Steam.

Will Force to any Height.

Delivers a constant stream.

Can be placed any distance away from a Boiler.

Occupies little space.

Simple, Durable, Economical.

NO FLY-WHEEL, CRANK, GOVERNORS, CONNECTING ROD, GUIDE, OR ECCENTRIC.

Supplied to H.M.'s Arsenal and Dockyards at Woolwich, Chatham, and Devonport, also for use on board H.M.'s Ships, Hercules and Monarch.

FORTY THOUSAND GALLONS PER HOUR IS BEING RAISED 40 FEET HIGH AT Mr. McMURRAY'S PAPER MILLS, WANDSWORTH, BY THE "SPECIAL" STEAM PUMP.

PRICES OF THE "SPECIAL" STEAM PUMPS.

Diameter of Steam Cylinder	2½	3	4	4	6	6	6	7	7	7	8	8	8	8	10	10	12	12	14	16	24
Diameter of Water Cylinder	1½	1½	2	4	3	4	6	5	6	7	4	6	7	8	6	7	8	10	12	7	10
Length of Stroke	6	9	9	9	12	12	12	12	12	12	12	12	12	12	12	12	18	24	24	24	24
Strokes per minute	100	100	75	60	50	50	50	50	50	50	50	50	50	50	50	50	35	—	—	—	—
Gallons per hour	310	680	910	2900	1830	3250	7330	5070	7330	9750	3250	7330	9500	13,000	7330	9500	13,000	—	—	—	—
PRICE	£10	£15	£20	£30	£30	£40	£47 10	£50	£52 10	£57 10	£50	£55	£65	£75	£70	£80	£100	—	—	—	—

IF BRASS LINED, OR SOLID BRASS OR GUN-METAL WATER CYLINDERS, WITH COPPER AIR VESSELS, EXTRA, ACCORDIN TO SIZE

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Mr. HENRY has had especial experience in technical French, and in French Manufacturing and Commercial Matters.

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Respectfully begs to inform Mine Managers, Surveyors, Engineers, &c., that having purchased Mr. Wilton's business, and the very valuable acquisitions and appliances belonging thereto, he has enlarged his Mathematical Instrument Manufactory, and is prepared to supply THEODOLITES, DIAPHRAGM DIALS, LEVELS, TRAVERSING and PLAIN PROTRACTORS, CASES OF DRAWING INSTRUMENTS, MEASURING CHAINS and TAPES, ASSAYERS' SCALES and WEIGHTS, ENGINE COUNTERS, and, in short, every description of Instruments used in SURVEYING, MEASURING, MAPPING, &c.

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THE PATENT**VILLEPIGUE PERFORATOR.**

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- 1.-EXTREME PORTABILITY. It can be carried, set up, worked, and taken down by one man.
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- 3.-RATE OF WORK. - In Coal Measures, or Portland Stone, 2 to 3 inches per minute; Sandstones and Slates, 3 to 4 inches per minute; Coal and Shale, from 30 to 60 inches per minute.

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SPEED of LATHES may be advantageously INCREASED FIFTY PER CENT., and upwards; it is the most DURABLE STEEL in the Market, and, unlike all other steel, when forged into the desired shape, it

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In place of OLIVE and other kinds ordinarily used on STATIONARY, LOCOMOTIVE, MARINE ENGINES, and MACHINERY of all kinds, and the undersigned are so satisfied of the correctness of this statement, that they are willing, at their own risk, to forward a cask of about 30 gallons for trial to any respectable person or company, on the understanding that it may be returned in a month if it should not answer, when payment would not be required, except for the quantity used.

There are two kinds, - the medium for engines and heavy bearings, and the light for spindles and light work. This oil will lubricate as well, and lasts as long, as olive, neats'-foot, and other expensive kinds, and is superior to rape, which is fully 50 per cent. dearer.

It never "CLOGS," nor leaves any "GUMMY" deposit upon the bearings, which, therefore, never require cleaning or scraping, whereby much time, labour, and expense are saved. It is in use and approved of by the majority of the iron and coal companies in West Lancashire, where it was first introduced but a few months ago, also by several ocean steamer and ferry proprietors on the Mersey and elsewhere.

Printed particulars and testimonials sent, post free, to any address.

DUNCAN BROTHERS, 17, Unity-buildings, Lord-street, Liverpool.

Original Correspondence.

LEAD MINING IN WALES.

SIR,—As several lead mines in the Rhydallog district are about to be worked, perhaps the following may be interesting to many readers of the Mining Journal.

T. E. W. THOMAS.

3, Great Winchester-street-buildings.

Extract from an unpublished work on the geology and mineralogy of Cardiganshire, written at different times, up to 1845:—

"Rhydallog, a mine on the land of Mr. John Jones, of that place, is 3½ miles east, 35° south of Tregaron, and is considered to be on the same lode as Llanael Chydwedy. It contains 79 ozs. of silver to the ton of ore. This mine has not been worked since 1770, when, or perhaps a few years earlier, the whole of the machinery, consisting particularly of a water-wheel and a set of stamps, were removed to Rhyseg, a neighbouring mine. The wheel-pit and water-loom may yet be seen, but the mine itself, formerly was not supposed to be capable of yielding corn, has been widely cultivated, and barley and oats have now so frequently occupied the beds of ancient ponds and washing floors that, unless pointed out, they would escape the notice of an unpractised eye. The River Towl, which was within a few yards of the engine-shaft, has swept away nearly all the waste stuff, which must at one time have been lying about in considerable quantities; and one thing with another has so completely obliterated the traces of mining operations, that a person without a guide may easily pass over this scene of former activity and not recognise it. Yet this mine had been most vigorously worked for the time, for the engine-shaft was stated by an old miner (now dead), who had been in it, to be 35 fms. deep, and to contain a part of the pump, a brass working piece, worth 40 guineas. He may not have been quite accurate as to the depth, but he was correct in another respect, for he said the shaft was covered over with timber and turf in order to keep it clear till the work should be again resumed, which was the general expectation, the stoppage having arisen solely on account of the sudden death of the manager of the mine. This shaft is now open, the covering having given way and fallen in, which so far goes to prove the truth of the statement made by the old man. He further mentions that the underground workings were to the west of this shaft, which is important, for the river is the boundary of the property, the eastern side belonging to the Earl of Lisburne, and that the ore, which had once been abundant and pure, had become in the end somewhat deteriorated by an admixture of blende and copper. This old man's name, which was no less than Jack, Jack, Jacky, Jack, affords a good example of Welsh nomenclature. Each of these words, after the first, is in the possessive case, and the English of the whole is Jack (the son of) Jack (the son of) Jack (who was the son of) Jack. The family have no other patronymic, and to render it doubly secure the eldest son has always John for his Christian name; but polite and modern phraseology has contrived to compress the whole into those two comprehensive monosyllables 'John' and 'son,' which, in the case of the Rhydallog mine, are as fallacious in appearance, but the want of roads has rendered it as yet an unknown land to the practical geologist, and the few existing discoveries of mineral deposits must be attributed to the merest accident rather than to any kind of research. It is difficult, if not impossible, to account in any other way for the paucity of mines on these hills, lying, as they do, exactly in, and being of like formation with, the great mining tract. On the south, distant a few miles only, is situated the very rich mine called the Llanvynw, with many others, whilst on the north the great wealth of Cardiganshire in this respect, is daily becoming more and more developed, both which circumstances combine to prove that the intermediate range may, and most probably does, contain mineral treasure in a similar degree."

MINING IN WALES—THE PWLHELI DISTRICT.

SIR,—It must have been pleasing to the shareholders of the Van Mine to read the remarks of Mr. H. Sewell (in the Supplement to the Journal of Jan. 22) on that property and management; and, as the world knows of the riches accumulated there through various channels, a few of the readers of the Journal would be glad to see something from the pen of Mr. Henry Sewell relative to the Pwllheli district, as we find Mr. Sewell has been exploring and inspecting of late in that celebrated locality.

An engineer of repute, worked up by his own exertions, speaks in cheering terms of the mineral value of the Asbecon, Pantgwyn, and Tan-y-rallt Mines, and, although personally I am satisfied with the opinion given, it would be pleasing to have it endorsed by others of practical experience, for really the reports in circulation of the growing value of Welsh lead mines are almost fabulous. Yet, on reflection, I can well remember several Welsh mines selling 500 tons of lead ore monthly; therefore, even a greater degree of success need not be unusual.

Feb. 2.

MINING IN WALES—THE EAST MAES-Y-SAFN.

SIR,—In reply to the enquiries of "L.S." in last week's Journal, I beg to state that the East Maes-y-Safn Lead Mine (Limited) has passed through the panic of the last two and a half years with credit, through the unflinching exertions of all concerned, and it is now in a healthy condition. At the last half-yearly meeting it was agreed to subdivide the 100 shares, so as to make them more easy for investors. All debts are paid, and there is a handsome balance in hand. Besides a large number of shares to be allotted, the mine is well furnished with plant and machinery for partial development. The engine-shaft, 13 by 8, is down 126 yards, and has about 35 yards further to go to the course of ore proved and left by the former workers. It only remains to erect the large engine, &c., as per prospectus, to fully open this, believed to be one of the richest pieces of lead ground in Flintshire. The usual annual meeting will shortly be held, the particulars of which will be published in the Mining Journal.

Mold, Feb. 2.

GORSIEDD AND CELYN LEVEL MINES.

SIR,—I have noticed, by announcements in the Journal, that these mines are about to be re-worked, and that the water, which before prevented operations below the shallow depth of 35 fms., is to be drained by the completion of the adit (now driven for about one mile); this it appears will involve but a small expenditure. Let spirit be displayed in the operation, and with a small capital I am satisfied that a great success will be the result, and open a splendid mining property.

INVESTOR.

NEW ZEALAND QUARTZ-CRUSHING AND GOLD MINING COMPANY.

SIR,—When this company was floated much was said about new and improved machinery one of the directors was to supply. On enquiry, I find the much-vaunted machinery has not been shipped, and that probably another six or twelve months may elapse before it is ready. Up to the present I understand it is not even perfected. Instead of waiting so long, would it not be prudent to get some old-fashioned machinery, such as the company has, instead of waiting to try a new patent, which may after all, turn out a failure? Immense success are now reported from this country; and when such have been obtained with the good old-fashioned machinery, I, for one, would advise the shareholders to press this important matter on the directors, who may find it very convenient to oblige one of their board, at the risk and expense of the shareholders.

One thing is certain—if a proper quantity of the usual machinery had been sent out when this company was started, a dividend might reasonably have been expected this year, whereas we are still to the day waiting for the new invention, which, if shipped to-morrow, could not earn and return a dividend under 12 months, owing to the fact that our venture is not in Wales, but in New Zealand.—Feb. 3.

[For remainder of Original Correspondence, see this day's Supplement.]

THE VAN MINE.

The following periodical report from Capt. Williams, the manager, will be read with interest:—

Llanidloes, Feb. 2.—Herewith I beg to hand you my monthly report and setting-list. Edwards's engine-shaft is down 14 fathoms 3 fms.; this party has yet ¾ fms. to sink to complete their shaft. The 45 fms. level, east of the 30, south of engine-shaft, is down 14 fms. I intend sinking this shaft 2 fms. deeper; set to nine men, at 24s. per fathom. The 30, west of engine-shaft, is extended 24½ fms. We are driving on the side of the main lode, in order to have stuff to fill up the stopes, and also to push forward to communicate with Edwards's engine-shaft as soon as possible. We are now and then stripping down a bit of the side of the lode, which I am glad to say shows rich; set to six men, at 80s. per fathom. The 30, east of engine-shaft, is extended 18 fms.; this level is driving in the south side of the lode, and this party has yet 1½ fms. to sink to complete their shaft. The 15, west of engine-shaft, is now driven 74 fms.; this level is driving in the soft by the side of the lode, and set to six men, at 80s. per fathom. The stripping down of the lode to full width eastward, from a point 15 fms. east of engine-shaft, is set to eight men, at 80s. per cubic fathom; the lode here is worth 75 cwt. of lead ore per cubic fathom. The stripping down of the lode to full width westward, from a point 12 fms. west of engine-shaft, is set to eight men, at 80s. per cubic fathom. The lode here is worth 4 tons of lead ore per cubic fathom. The 15, west of engine-shaft, is now driven 74 fms.; this level is driving in the soft by the side of the lode, and set to six men, at 80s. per fathom. The stripping down of the lode to full width eastward, from a point 15 fms. east of engine-shaft, is set to eight men, at 80s. per cubic fathom. The lode here is worth 75 cwt. of lead ore per cubic fathom. 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The sett, or grant, which is very extensive, is in a district where are to be found some of the most productive and best paying mines

WATSON BROTHERS' MINING CIRCULAR.

The great extension of mining business, the difficulty so often complained of by country shareholders in getting accurate and disinterested information as to the state of Cornish and foreign mines, and of the financial and real position of mining companies generally, have induced Messrs. WATSON BROTHERS to make their Circular published in the *Mining Journal* more extensively known, and to state—

That they issue daily to clients and others who apply for it a price-list (as supplied, also, to most of the London daily papers), giving the closing prices of mining shares up to 4 o'clock.

They also buy and sell shares for immediate cash or for the usual fortnightly settlement in all mines dealt in on the Mining and Stock Exchanges, at the close market prices of the day, free of all charges for commission. They deal, also, on the same terms, in the public funds, railways, telegraphs, and all other securities dealt in upon the Stock Exchange.

Having agents in all the mining districts, they are constantly getting mines inspected for their own guidance, and will also obtain special reports of any particular mine for their clients, for the inspecting agent's fee of £2 2s.

On the arrival of the West India, Australian, and other mails special information will be forwarded to their clients interested in foreign mines, particularly Australian United, Chontales, Pacific, Eureka, &c., &c.

WATSON BROTHERS,

MINING AGENTS, STOCK AND SHARE DEALERS, &c.
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

Messrs. WATSON BROTHERS return their most sincere thanks for the great patronage bestowed and confidence reposed in their firm for nearly 30 years, and to assure their friends and clients it will be their earnest endeavour to merit a continuance of both.

Messrs. WATSON BROTHERS have made arrangements for continuing their weekly Circular, which has had a large circulation for many years, to the columns of the *Mining Journal*, their special reports and remarks upon mines and mining, and state of the share market, will in future appear in that paper. In the year 1849, when Cornish mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. Y. WATSON, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium, published in 1849, Mr. WATSON was the first to recommend the system of a "division of small risks in several mines, ensuring success in the aggregate," and Messrs. WATSON BROTHERS have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and share dealing than there is at present; and from the lengthened experience of Messrs. WATSON BROTHERS, they are emboldened to offer, thus publicly, their best services to all connected with mines or the market, as they have for so many years done privately, through the medium of their own Circular.

Messrs. WATSON BROTHERS are daily asked their opinion of particular mines, as well as to recommend mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

VAN CONSOLS.—In answer to several correspondents, we believe the water-wheel will go to work in about a month, and it will not take long to pump the water from the small shaft, in which the old company, before Van was discovered, left, it is said, a course of ore. The present great rise in shares has been owing to very large purchases of the Stock Exchange, and the hourly fluctuations of 10 or 20 per cent make it impossible to do business with any satisfaction. Should ore be met with, the present rise has indicated what shares will go to.

Another correspondent has been told, on the authority of one of the directors of Van, that there is a hard bar of granite in the west part of Van, which will prevent the lead making ore in Van Consols? How was it then, we ask, that the lead was first discovered in Bryntal, now Van Consols? In the western part of Bryntal, where it was first worked, it yielded fortunes to some people, as it has done in Van, but it failed in depth. In Pen-y-Clyn, adjoining, and also west and beyond the influence of any bar of granite, the lead for some time yielded 150 tons of lead per month, and failed in depth. And then it was found in Van itself; the very fact of the lead having failed in depth in the other mines deterred Messrs. John Taylor and Sons from buying Van for £5,000. The writer of this, reporting on the mine from a personal inspection nearly 12 months ago, called attention to the lead ore in the Stock Exchange, and the lead ore in Van, it will become one of the richest mines in the world. And now, in answer to one of the directors who talks of the bar of granite, let us refer to a paragraph in Captain Eddy's report, now being circulated by the board of directors, and in which he says, referring to an inspection of the mine before the purchase by the present company—"I then shared in the same opinion with some others, that the ore would be cut off in depth, the same as it had in the adjoining mine." If the statement of the directors in regard to the bar of granite is correct, how was it, we ask, that the lead was first discovered in Van? We give it upon the authority of Capt. Williams, the manager of Van, himself, that the Bryntal, or Van Consols, is the Van lead; and, we add, that between the rich course of ore just worked in Bryntal, and the rich course of ore now being worked in Van, there is a long run of unwrought ground in Van Consols, which cannot, in our opinion, fail to make a course of ore.

SATURDAY.—Active demand for Pacific, Van, Van Consols, Bwlch, Bronfloyd, West Frances, Providence, and East Lovell, at advanced prices. Pacific, 11½ to 12½; Van, 67 to 69; Van Consols, 3½ to 3½; Bwlch, 3 to 3½; Bronfloyd, 3½ to 3½; West Frances, 35½ to 35; Providence, 35 to 37; East Lovell, 24½ to 24½; West Chiverton, 55 to 56; West Maria, 42½ to 44½; Chiverton Moor, 4½ to 4½; Australian United, 2½ to 2½; Prince of Wales, 17 to 18.

MONDAY.—Great excitement in the market this morning. Van advanced to 82½. Van Consols, Bronfloyd, Bwlch, West Frances, West Frances, Taguairi, and Prince of Wales in great demand. Van, 80 to 85; Van Consols opened at 8, and rose to 6; Bronfloyd, 3½ to 3½; Bwlch, 3 to 3½; West Maria, 42½ to 44½; West Frances, 34 to 36; Taguairi, 14½ to 15½; Prince of Wales, 18½ to 20½; Providence, 36 to 38; Seton, 40 to 41; Pacific, 12 to 13; Australian United, 2½ to 2½; Chiverton, 2½ to 2½; West Chiverton, 55 to 56.

TUESDAY.—The market continues very active for Van, Van Consols, West Chiverton, Bwlch, Bronfloyd, East Lovell, and Australian United. Van, 82½ to 87½; Van Consols, 5½ to 6; West Chiverton, 55 to 57; Bwlch, 4½ to 5; Bronfloyd, 3½ to 4; East Lovell, 24½ to 25½; Australian United, 2½ to 2½; West Frances, 34 to 40; Prince of Wales, 19½ to 21½; West Maria, 44½ to 45½; Tin-croft, 19 to 20.

WEDNESDAY.—The Market for Van Consols opened this morning very flat; sellers at 4, and received to 3½ upon large sales. Van and Great Vor flat; West Maria, West Frances, East Lovell, and Bronfloyd firmer. Van Consols, 3½ to 4; Great Wheel Vor, 11½ to 12½; Van, 70 to 75; West Maria, 47½ to 48½; West Frances, 37½ to 40½; Taguairi, 15½ to 17½; Bronfloyd, 4½ to 4½; West Chiverton, 55½ to 57½; Taguairi, 15½ to 17½; East Caradon, 6 to 6½; Great Laxey, 16½ to 17½; Great Rock, 16 to 17; Crebore, 9½ to 11½; Prince of Wales, 19½ to 21½; Bwlch, 4½ to 5.

THURSDAY.—Market somewhat recovered from yesterday's panic. Pacific, Van, Van Consols, Crebore, Redmoor, Bwlch, Bronfloyd, and East Lovell chiefly dealt in. Pacific, 11½ to 12½; Van, 72½ to 75; Van Consols, 4 to 4½; Crebore, 11½ to 13½; Redmoor, 15½ to 20½; Bwlch, 4½ to 5½; Bronfloyd, 3½ to 4½; East Lovell, 25 to 25½; West Chiverton, 55½ to 56½; Great Vor, 11 to 12; Don Pedro, 24½ to 25½; Taguairi, 17½ to 19½; Greenville, 35½ to 40½; East Greenville, 14½ to 15½; Prince of Wales, 20½ to 22½; West Maria, 44½ to 49½; West Frances, 34 to 40.

FRIDAY.—Market steady. Van Consols firm at quotations. Crebore in good demand. Van Consols, 2½ to 3½; Crebore, 12½ to 15½; Great Laxey, 16 to 16½; Bwlch, 4½ to 5; Bronfloyd, 3½ to 4; East Lovell, 25 to 26; Van, 72½ to 74; West Chiverton, 55 to 57½; East Caradon, 6 to 6½; Marke Valley, 6½ to 7½; West Maria, 47½ to 50½.

Mining Correspondence.

BRITISH MINES.

ABERDAUNANT.—John Roberts, Feb. 2: The mine which we are sinking in the south part of the mine is 10 ft. down about 3 fathoms. We have not since cut into the ore part of the mine, as we are afraid to let down the water and stay our progress in sinking. We have good ground now in the No. 2 adit, which we are driving alongside of the mine, and hope to be up to the mine in about six weeks, when I anticipate that we shall commence extracting large quantities of ore. As the frost is gone we shall be able to make good progress with the dressing, and as the reservoir will be complete on Friday we shall be able to cross every day. There is no other change since last report.

BALLACORRISH.—Cannon Grove, Jan. 29: I am very happy to inform you that the mine in the adit forebore is gradually opening out; it is near about 18 in. wide, composed of gossan, quartz, and soft killas, spotted through with carbonate of lead and blende. I have reason to believe that the mine will in a short time regain its usual size and productiveness. Nos. 1 and 2 pitches are much the same as last reported on. If anything, No. 3 pitch is improving. We have commenced to drive the south adit forebore, and the mine here is split up into strings of blende, spotted with lead. The ground in the forebore of the 12 consists of a beautiful blue killas, and within the last few days the stuff, mixed with lead and blende, has made its appearance. The dressing and all other surface operations are progressing satisfactorily.

BEDFORD CONSOLS.—Joseph Mitchell, Jan. 29: The middle adit level has been driven east of cross-cut on the new south lode, varying in size from 1½ to 5 ft. wide, with occasional stones of ore; the lode in the present end is small and poor; I have, therefore, thought it wise to suspend operations at this point. We have also driven west of cross-cut 23 fathoms, the lode varying in size from 3 to 6 ft. wide, with places from 2½ to 5½ ft. per fath., this point being near the western boundary we have also stopped the driving, and have commenced to drive east in the middle adit level, on the Gawton lode, from which most of the ore has been broken and returned. I think that we shall have an improvement at this point shortly, as we get off from the influence of the cross-course. We have driven the cross-cut 23 fms. south towards the engine-shaft lode, and I calculate about 3 fms. more to drive to intersect the lode; this is an important point, being 60 fms. deep from surface, perpendicular. We have also driven east of shallow adit air-shaft 5½ fms., from which we have broken 30 tons of muddle, and is now worth in the present end about 4 tons per fathom, and is equally good in the bottom of the level. Just at this point is a junction of two lodes, and I am of opinion that if we sink the shaft we shall have large deposits of ore underneath this mass of gossan and muddle seen above. I consider, to do justice to the mine, that you ought to put up a water-wheel, and do away with the steam-engine; cut down the air-shaft, and sink 20 fathoms below the shallow adit, which will cost about 1000s. You will then have a mine second to none in the district, for better indications than I ever saw in the whole course

of my mining experience.—P.S. Since writing you the report I have just been underground, and am pleased to say that since we commenced operations on the Gawton lode it has very much improved in appearance, and is producing rich copper ore.

BEDFORD UNITED.—James Phillips, Feb. 2: We are driving by the side of the lode east and west at the 130. The lode in the 90 west has not been so productive for the last 6 feet driving, but is still 4 feet wide, and is a very kindly looking lode, promising a speedy improvement. The stone in the bottom of this level is worth 4 tons of good quality ore per fathom. In the 90 east we are driving by the side of the lode, which we have not seen for the last 3 fathoms; in consequence of a very strong capel upon it; we hope to reach the eastern end of this capel shortly, when the lode will be again cut through; when last taken down the lode was worth about 2 tons of ore per fathom. The lode in the winze in this level is 4 feet wide, and worth for the length of the winze 112 feet, from 8 to 10 tons of ore per fathom; there has been a falling off in the western end of this winze for the last 6 feet sinking, but the eastern end is still worth from 6 to 7 tons per fathom, indicating that we are on the western end of the splendid shoot of ore; the winze for a depth of 8 fathoms have been sunk through the foot of shaft at the 112 level, and we will be able to reach the eastern end at the 93, when that level is extended far enough east to reach the dip of the ore. We are driving by the side of the lode in the 75 east; the lode in the winze in this level is 2½ feet wide, producing 4 tons of ore per fathom; this winze is now 10 fathoms deep, and the lode has much improved in appearance, and the quality of the ore has been better for the last 8 or 9 feet sinking. The stone in this level are yielding on an average about 4 tons of ore per fathom.

BLUE HILLS.—S. Bennett, J. Andrews, Jan. 29: The pumping machinery at Letcher's level of 112 fms. has been at work the last 24 hours, and the 66 there is no change to report, very little alteration having taken place during the past week. The 50 east contains a large lode, and some good stones of tin, but is very irregular. The ground in the shaft below the adit, on Claridge's lode, is very favourable for sinking, but as yet none of the lode has been broken below the level. On Monday morning we hope to commence driving the 60, east from the bottom of Letcher's shaft, and at the same time stop away the tin ground still standing in the bottom west of this point.

BRONFLOYD.—T. Kemp, Feb. 3: Settings for February: No. 3 Shaft—North Lode: Six men to cross-cut the lode north, in the 84, at 180s. per fathom; lode carrying spate of lead ore, and the ground rather tight for progress. The winze to the west of shaft, being sunk from the 73 to the 84 under contract at 200s. per fathom, is down 3 fathoms; the lode in the bottom is not looking so well, the ground having become harder, and the produce less, now yielding 1½ ton of lead ore per fathom in depth. Eight men to stop the lode over the back of the 73, to the west of shaft, at 180s. per fathom; lode carrying spate of lead ore, and the ground rather tight for progress. Six men to stop the lode under the 82; lode worth 1½ ton of ore per fathom. Two men to drive the end to the west of shaft, at 75s. per fathom, producing a little ore. A tribute pitch in the back of the 82 is set to four men, at 180s. per ton of dressed ore fit for market. As instructed, the 40 and west is suspended, and we shall at once commence to cross-cut the lode north and south.—No. 1 Shaft—North Lode: The pit, &c., being completed, this shaft is now in regular course of sinking below the 26, and in favourable ground. We are sinking in this level 72 tons of silver lead ore, at 180s. per fathom.

BRYNOSTIG.—J. Kitto, Feb. 3: We are now making good progress in sinking the engine-shaft below the 36 fms. level, and hope to get it down for a new 48 fms. level in two months from this date; the lode is large, and of a very promising character, but so far not rich enough to value; I expect, however, to get into better ore ground in a week or ten days. The 36 fms. level, driving east of engine-shaft, is now passing through a bar of unproductive ground, which the pit is cut we cannot say much about the lode. There is no change in the 25 fms. level, and are pushing the lode as rapidly as possible to get through it, as we know there is another bunch of ore to the east. The two stops in the roof of the 36 fms. level are looking very well, and are yielding a fair quantity of ore. We shall sell on Wednesday next 20 tons of lead ore, and 20 tons of blende.

BWALLEN CONSOLS.—Robert Northey, Jan. 31: The engine-shaft is now about 10½ fms. below the 45 fms. level, and we intend sinking 9 ft. deeper before we commence cutting a pit; the lode has taken less underlie, and until the pit is cut we cannot say much about the lode. There is no change in the 25 fms. level, but, judging from the position of the lode, we may hope soon for an improvement. The other points in the mine, including the stops, are without material alteration. The cross-cut at Dolfawr is getting near the line of the lode, which I expect will be cut in a short distance of driving. I am glad the thaw has enabled us to go on regularly with the dressing operations.

BWLCH CONSOLS.—Robert Northey, Feb. 1: The lode in the 70 fms. level is 3 feet wide, carrying a mixture of lead ore; we are daily expecting an improvement in this level. The lode in the 60 fms. level is 1 ft. wide; at this point it is discarded by cross-heads, same as in levels above. The lode in the 50 fms. level is 3 ft. wide, and worth 1½ ton per fathom. The lode in a level, driving east about 12 fms. above the back of the 30 fms. level, is worth 18 cwt. per fms., thus laying open a greater length of profitable ground. The ground in the cross-cut driving north in the 40 fms. level is harder for progress. Nothing new in the 30 fms. level cross-cut. The stops throughout the mine will yield their usual quantities of ore. The front is pretty much gone, and we resumed crushing and dressing yesterday morning. The other prospects are good, and the mine fully warrants this being done immediately. The lode in the end driving west at the same level is about the same size, and full of sulphur, but contains no ore to value. Its general character, however, is very good. There is no change in the deep adit level since my last.

CARADON CONSOLS.—S. Bennett, Feb. 1: The small cross-course last cut in the 90 east has formed a junction with the main cross-course in the 90 fms. level north of this level, and has driven a wide space of ground, and has been found in finding a lode defined near this point. There has been but little lode broken in the 90 east during the past week. In a winze below this level the lode is 2 ft. wide, and producing 1½ ton of ore per fathom. The No. 2 lode, in the 78 west, is without much change. The same lode, in the winze below this level, has improved, and is from 1 to 1½ ft. wide, ore throughout.

CARDIGAN BAY CONSOLS.—C. Williams, Feb. 3: Penarth: The present change in the weather has enabled us to resume the building of the wheel-pit, and the adit, and also to resume the progress of the engine-shaft, and to work in a most satisfactory manner.—Eastern Adit: The lode in this adit is fast improving, being 4 ft. 6 in. wide, composed of blende, crystallised spar, gossan, carbonate of lime, and lead ore, yielding of the latter fully 15 cwt. per lineal fathom, with every appearance of great improvement; in my opinion a more promising lode cannot be found in any part of Wales.—North Adit: During the past month the level has extended 5 fms. 1 ft., making a total length from the entrance of 119 fms. 4 ft. The ground in the end is stiff clay-slate, and some steel ore, which is being worked, and is being carried on to the adit at hand.—Bryanair Old Adit: We shall complete clearing out this level to the junction of the copper and lead lode about Saturday night, after which we shall proceed driving on its course eastward.—Boundary Shaft: This shaft is now down 14 fms. below surface; the lode in the bottom is 7 ft. wide, composed of spar, slate, and rich branches of lead ore throughout; when this shaft is communicated with the workings below a large and profitable return may be relied upon.—Boundary Adit: The lode in this adit is 4 ft. 6 in. wide, consisting of spar, slate, and rich branches of lead ore, and is being carried on to the adit at hand.—Bryanair Old Adit: We shall complete clearing out this level to the junction of the copper and lead lode about Saturday night, after which we shall proceed driving on its course eastward.—Boundary Shaft: This shaft is now down 14 fms. below surface; 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quantity has considerably more than quadrupled in five years, and more than doubled in the past as compared with the previous season.

ADVERTISING SHARES AT FIXED PRICES.—From enquiries we have made, we are assured that the Advertisement headed "The Advertising Price System," to which so much objection has very properly been taken, did not emanate with the Mining Exchange; and that the only reason of the Committee taking notice of it was in consequence of the Exchange being mentioned by the writer.

MINING IN WALES.—In consequence of the severity of the weather, Mr. GEORGE HENWOOD was obliged to defer his visit to Wales, as announced in last week's Journal; he is now, however, on the spot. We have been requested to state that all letters addressed to him at the Post-office, Llandidloes, up to Feb. 13 will meet with prompt attention. Mr. Henwood purposes visiting the new slate discoveries and copper mining districts at an early date, of which we shall be duly apprised.

THE VAN MINING DISTRICT.—Mr. THOMAS SPARGO, of Gresham House, London, being on a visit to the above district, requests that communications requiring immediate attention be forwarded to him, addressed to the Trewhyan Arms, Llandidloes, up to Friday, Feb. 11.

LEAD MINING IN WALES—THE PEN'ALLT MINE.—At the time this property was introduced to the public attention was directed to the fact that four large lodes had been discovered, one of which was 30 ft. wide, and another from 10 to 15 ft. Silver-lead ore from the former has given an average of 50½ per cent. for lead and 13 ozs. of silver per ton. The property possesses every economic facility compatible with a speedy and extensive development, and a large stream of water passes through the set, which can be made available for all dressing and other purposes. According to the testimony of one of the leading practical authorities upon Welsh lead mines, who has examined mines in almost every lead-producing district in Wales, there is not a mine at the same stage of development showing better prospects, or one more likely to become in a comparatively short time a permanently paying property. Since the report, in which the above opinion was expressed, active operations have been in progress, and the result has been most satisfactory. The mine sinking below the No. 3 cross cut is producing splendid stones of silver-lead ore. A water-wheel is in course of erection. Since the original assay (above referred to) others have been made, by which the ore yields from 20 to 100 ozs. of silver per ton.

VAN—SPECIAL REPORTS.—That the unprecedented position which this property has attained is amply justified by its daily increasing resources is abundantly confirmed by the two special reports which have just been issued to the shareholders. One authority, Captain Arthur Waters, whose report proves that he has gone into every detail with the utmost care and practical minuteness, computes the present reserves of lead at 171,000 tons, the money value of which, at 12s. per ton (and it realises 13s. 6d. per ton) is upwards of 2,000,000l. sterling; and the present reserves of blende at about 50,000 tons, representing a money value of something like 175,000l. Capt. Walter Eddy, whose report is also of the most encouraging character, referring to the question of reserves, says that "the estimates may be as high as the magnitude, but (he says) it should be remembered that the lode is exceptionally wide, being 6 fms. from one wall to the other in every place where measured, so that it really contains 12 or 15 good sized lodes in one, and rich withal." From a careful perusal of the reports, and a glance at the longitudinal section accompanying them, it is evident that the valuation of the reserves refers to only a small portion of the enormous wealth of this truly marvellous discovery. With a lode 40 to 60 ft. wide, in an undisturbed stratification, and with such strength and richness, there can be no reasonable doubt but that the opinion expressed in these reports will be realised, by the mine proving of equal, if not of greater, value to many times its present depth. Laterally, the "ends" being very rich, and the appearances in the shaft now being sunk more than 100 fathoms in advance of the present end, there are equal chances of the deposit of ore continuing in that direction; it is estimated that if it continues only to Edward's shaft the reserves would be at once doubled, irrespective of depth. At the eastern portion of the mine (a distance of nearly 200 fms. from the present engine-shaft), and where the first discovery of lead was made, no workings have been prosecuted, although Capt. Walter Eddy considers that "the ground in this direction is very promising." He adds, that "this ground being drained by the workings to the west, showing the looseness of the lode between the two places, is a favourable indication of the existence of ore ground." Capt. Waters concludes his report by stating that in the course of the next 18 months the mine will be sending into the market 1000 tons of lead, and (say) 400 tons of blende monthly, which will leave to the company a profit of between 100,000l. and 120,000l. per annum. The manager's periodical report appears elsewhere.

VAN CONSOLS (LATE BRYNTAIL MINE).—Mr. H. B. RYE, having had considerable experience herein during the past unfortunate working, is OPEN to GIVE the BENEFIT thereof to INVESTORS, who may desire sound advice, and will give him their confidence. 77, Old Broad-street, E.C. Established Twenty-five Years. Bankers: Roberts, Lutbock, and Co.

MESSESS. J. HUME AND CO., 74, OLD BROAD STREET, LONDON, E.C. VAN, ASHINGTON, and TAN-YR-ALLT were recommended in our "Investment Record and Mining Review" previous to the advance, and now show profits of upwards of 100 per cent. in a few weeks. Copies for January now ready, each, free by post.

DIVIDEND MINES.—Shares in various, paying 10 to 20 per cent. on outlay. **PROGRESSIVE OR NON-DIVIDEND MINES.**—We are in a position to name two or three mines, likely to rise 300 or 400 per cent. **PACIFIC GOLD MINING COMPANY (Limited).**—Shares are 1¼ to 2 prem., are rapidly rising, and will continue to rise for some time. Messrs. H. and Co. transact business in railways, foreign bonds, and all classes of shares at net prices, or commission 1¼ to 1½ per cent. Bankers: The London Joint-Stock Bank.

MR. THOMAS THOMPSON, STOCK AND SHAREDEALER, AND MINE AGENT, 17, OLD JEWRY CHAMBERS, LONDON, E.C.

MR. J. B. REYNOLDS, STOCK AND SHAREDEALER, 70 AND 71, BISHOPSGATE-STREET WITHIN, LONDON, E.C. Office hours from Ten till Four. Hours for consultation from Eleven to One, and from Two to Four. Business promptly transacted at net prices.

Mr. J. B. REYNOLDS holds himself personally responsible to the buyer or seller for the fulfilment of all engagements. In consequence of Mr. Reynolds's long connection with Cornwall, and his acquaintance with the leading mining authorities, &c., he is at all times ready to give the most reliable information. All communications will be held strictly confidential. The advertiser has a selected list of investments which commend themselves to the judgment of practical men, and may be considered as safe for all classes of capitalists. Telegrams promptly acknowledged. Bankers: City Bank. Established Twelve Years.

Mr. REYNOLDS is a BUYER of 200 Trevanick, at £2 2s. 9d. per share; and has SPECIAL BUSINESS in South Redmoor, Frontino and Bolivia, Guerrero, Chontales, United Mexican, St. John del Rey, Pacific, Great Western Gas, Caldbeck Fells, Exchequer, Scilper, and many other British and Foreign Mines. 70 and 71, Bishopsgate-street Within, London, E.C.

MR. C. A. POWELL, BRITISH AND FOREIGN STOCK AND SHAREDEALER, No. 1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C.

BUYER or SELLER of shares in Caldbeck Fells, Frontino, North Treskerby, Chontales, Pacific, Welsh Consols, Great Vor, Prince of Wales, &c. Mr. POWELL directs special attention to Aberdennant, Bwch Consols, and Pacific. Telegrams promptly attended to. All business transacted at net prices, for cash or settlement. References exchanged. Bankers: City Bank, Finch-lane.

MR. EDWARD GLEDHILL, MINING AGENT AND ENGINEER, CLAREMONT HILL, SHREWSBURY.

For several years practically connected with the Cardiganshire, Shropshire and other mining districts. Mines surveyed and reported upon. The management of mines conducted. The sale of mines and mining property negotiated. Shares dealt in. Assays and analyses undertaken.

MR. THOMAS THOMPSON, ASSAYER, &c., COPPER ORE WHARVES, SWANSEA

* With this week's Journal a SUPPLEMENTAL SHEET is given, which contains: Prof. Smyth's Lectures at the Royal School of Mines—Original Correspondence: Inspection of Collieries (J. Dickinson); Boiler Explosions; Mining in Colorado (J. Archibald); Gold Mining in Grass Valley, California (T. Faulk); Mining in Ireland; Mining in Cornwall; The Marazion District (A. Francis); Mining in Cardiganshire (S. Trevethan, jun.); Rhosmor Mine, Flintshire (J. Trevethan); Yorke Peninsula Mining Company (J. Respondens); Virtuous Lady Mine (T. J. Barnard, T. Neill, &c.); Mines and their Prices—Foreign Mining and Metallurgy—Foreign Mines Reports—Patent Matters (M. Henry)—Economy of Fuel in Blast-Furnaces (C. Cochrane)—Temperature of Coal Mines (E. Hull), &c.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, FEB. 4, 1870.			
COPPER.			
Best selected, p. ton	73	0	75 0 0
Tough cake and tile	71	0	73 0 0
Sheeting & sheets	76	0	—
Bolts	77	0	78 0 0
Bottoms	79	0	80 0 0
Old (Exchange)	64	0	—
Burra Burra	73	0	73 10 0
Wire, per lb.	0	10	—
Tubes	0	11	—
BRASS.			
Sheets, per lb.	8½d.	9d.	—
Wire	7½d.	—	—
Tubes	10½d.	11½d.	—
Yellow Metal Sheet, p. lb.	6½d.	6¾d.	—
Sheets	6½d.	6¾d.	—
SPELTER.			
Foreign on the spot	£15	15	0 0
to arrive	18	15	0 0
ZINC.			
In sheets	23½	0	—
QUICKSILVER (p. bottle)	6	17	0 —
TIN.			
English blocks	113	0	0
Do., bars (in bails)	114	0	0
Do., refined	118	0	0
Banca	113	0	114 0 0
Straits	113	0	114 0 0
TIN-PLATES.			
IC Charcoal, 1st qua.	1	6	0-1 7 6
IX Ditto, 1st quality	1	12	0-1 13 6
IX Ditto, 2d quality	1	3	6-1 6 6
IX Ditto, 3d quality	1	11	6-1 12 6
IC Coke	1	2	6-1 3 6
IX Ditto	1	8	6-1 9 6
Canada plates, p. ton	13	0	14 0 0
Ditto, at works	12	0	13 0 0
IRON.			
Bars Welsh, in London	7	5	0 —
Ditto, to arrive	7	5	0 —
Nail rods	7	5	0-7 10 0
Staf, in London	8	5	0-9 0 0
Bars	8	0	0-9 0 0
Hoops	8	17	6-10 15 0
Bars, at works	7	15	0-8 0 0
Hoops	8	2	6-8 5 0
Sheets, single	9	15	0-11 0 0
Pig No. 1, in Wales	3	15	0-4 6 0
Refined metal, ditto	4	0	0-5 0 0
Bars, common ditto	6	15	0 —
Do., rolled, Tynesor Tees	6	10	0 —
Do., railway, in Wales	6	12	0-7 0 0
Do., Swed. in London	10	0	—
To arrive	10	0	—
Pig No. 1, in Clyde	2	18	6-3 5 6
Do., f.o.b. Tynesor Tees	2	9	6-—
Do., Nos. 3, 4, f.o.b. do.	2	6	2-7 0
Railway chairs	5	10	0-3 15 0
spikes	11	0	1-2 0 0
STEEL.			
Swed., in kegs (rolled)	13	15	0 —
" (hammered)	14	15	0 —
Ditto, in faggots	15	15	0-16 0 0
English, spring	17	0	0-23 0 0
LEAD.			
English Pig, com.	18	15	0 —
Ditto, L.B.	19	2	6-—
Ditto, W.B.	19	10	0 —
Ditto, sheet	19	10	0-19 12 6
Ditto, red lead	20	0	0-20 10 0
Ditto, white	27	0	0-30 0 0
Ditto, patent shot	22	0	—
Spanish	18	5	0 —

* At the works, 1s. to 1s. 6d. per box less.

REMARKS.—Business in most branches of the Metal Trade during the past week has been steady and of a satisfactory character. Those who are content with slow but certain improvement, the result of the legitimate requirements of trade, are satisfied, while on the other hand speculators are discouraged because there are no indications of those sudden convulsions which afford them the opportunity of operating for the rise or fall. *Bona fide* purchasers receive increasing encouragement to come into the market, and as the season advances there is every probability of a large and sound business being transacted. Lead manufacturers and shippers alike are but content with "small profits, quick returns, and cash payments," and our predictions at the opening of the year will be more than verified.

COPPER.—The market has throughout the week been in favour of buyers. Chili bars, which at the close of last week we quoted at 66½ ls., have been reported done as low as 66l. and 66½ ls., at which prices some hundreds of tons have changed hands. The report from Valparaiso, dated Dec. 16, states that the market had experienced very little alteration during the preceding fortnight. Nearly all the small lots arriving from the interior had been disposed of at \$13.90 per quintal on shore, and a sale of about 2000 quintals had been made at Coquimbo, at same price and conditions. No sales f.o.b. on the coast had been made during the fortnight. Regular: Several lots had been bought at last quotation—say, \$6.05 per quintal, of 50 per cent. f.o.b.—and probably on account of the present low rate of freight this price will be maintained.—Ores: No sales for export. Quotations: Bar copper, \$13.90 per quintal; spot, \$14.25 to 14.30 per quintal, f.o.b. at Guayaquil or Lota; 14.35 to 14.40 per quintal f.o.b. for extra brands. Ingot copper, \$15.20 per quintal, f.o.b. at Lota. Regular, \$6.50 per quintal, f.o.b. 50 per cent. Ores, \$2.62½ per quintal, f.o.b. 25 per cent. The market for English varieties is dull. Until the make is reduced more in proportion to the demand, or unless some unforeseen contingency should arise, there can be no improvement expected in the copper market.

IRON.—Scotch pigs have remained without much alteration, 55s. 6d. cash, and 55s. 9d. one month offered, succeeded by lower sales at 55s. cash, and 55s. 4½d. one month. A moderate amount of business has been done at about these prices. Shipments are reported good, and although enquiries are not at the moment so brisk as they have been, it is anticipated that during next month, if not before, a large business will be done. The miners in the Middlesbrough and Cleveland districts are out on strike, thus a large body of men are thrown out of work, so that should the strike continue, the out-turn of the raw material being reduced, higher prices in pig-iron may be looked for. Mr. Hughes, M.P., has been invited to undertake the settlement by becoming arbitrator of the differences between masters and men. The iron-workers demand an advance of 5 per cent. The furnace-workers have accepted an advance of 5 per cent., their claim having been for 10 per cent. About 100,000 tons of pig-iron has changed hands at Cleveland since our last report. There are 123 furnaces in blast in the North of England. Prior to the strike referred to above the increased rate of production of pig-iron had attained to upwards of 1000 tons a week. The increased production has been occasioned by the present and anticipated demand. The bar, hoop, and plate iron trade is quiet; buyers are holding off in the hope of a return to the prices which ruled before the late advance was established, but there seems to be a gradually increasing disposition in some quarters to meet sellers' terms. The fact of the introduction of the Russian and Chilean loans for railway purposes may be taken as an assurance that ere long rail orders will be given out at remunerative prices, which will render the ironmasters comparatively independent of orders for merchant bars, &c. Other foreign markets besides those named will probably soon be enquiring for railway iron. Shipments of pig-iron from Glasgow for the week ending Jan. 30, 1869, 9836 tons; ditto Jan. 29, 1870, 9319 tons: decrease, 517 tons. Total increase since Jan. 1, 12,972 tons. Imports of Middlesbrough pig-iron into Grangemouth:—Total imports till Jan. 29, 1870, 8190 tons; ditto Jan. 30, 1869, 7065 tons: increase, 1125 tons.

LEAD.—There is not much change to report. A steady demand continues, without alteration in prices.

SPELTER.—There are sellers of Silesian at 19½, but the demand is not brisk, and lower prices have to be accepted, if business is to be done. English hard spelter rules at 15½ ls., but without much doing.

QUICKSILVER.—No change in price. The market is quiet.

TIN-PLATES.—The effect resulting from reduced make is already being felt, in great firmness and somewhat higher prices. The best brands, IC coke, now quote 23s., and a fair amount of business has been done, in anticipation of the higher prices which it is expected will be asked as the spring advances.

TIN.—There will always be found, in every community, a number of persons who, from self-interested motives, or natural temperament, are disposed to take the least hopeful view of things, and it would be strange indeed if the community of which the metal market is composed proved the exception to the rule. Some eighteen months ago, when the price of Straits tin stood at 72½, these depending members of the metal trade shook their heads, and confidently predicted that "it won't last"—"tin must go down"; and when urged for their reasons for so discouraging a conclusion,

they replied, that inasmuch as the cost of production was said not to exceed 30l. to 40l. per ton, it necessarily followed that the price in our market must drop to that figure, or to a point approaching it. But they were mistaken. Tin continued to rise steadily; but "it couldn't last." Then, after a gradual rise to about 97½, there was a rush in the market, and tin was forced up much beyond its legitimate value. Strange to say, when this was the state of the market, and there existed good cause for the oft repeated warning, "it won't last," the only whisper that was heard was "market very firm, prices going up;" and in place of legitimate business, the reprehensible practice of making bets—offered and taken—that before certain fixed dates tin would be 120½, 130½, and even 140½ per ton was resorted to. The price, as recorded, advanced from about 72½ to 140½, or nearly doubled itself. The one was as absurdly low as the other was positively high. Purchasers at 72½ had ample grounds for the assurance that their property would materially increase in value. Their purchases were based upon fair and reasonable prospects—nay, even those who bought after the market had taken a start in an upward direction were justified by the result in the conclusion to which they had arrived. Had the market been left in the hands of these *bona fide* purchasers, who had bought with reference to the requirements of trade, all would have been well, but when these ceased to buy, speculators not sufficiently strong to maintain the required position came in; the market became inflated, and the result was sudden and complete collapse, involving themselves in ruin and others in loss and inconvenience. As already known, the price receded to 104½, or a fall of about 36½ per ton, being a drop of 25 per cent. The stocks then changed from weak into strong hands, and a firm market may now be expected for some time to come. Those who have been holding off till the last moment before buying may find that further delay may prove still more unfavourable to them. The article is unquestionably scarce in the London market, and hitherto only to be met with in insignificant quantities. To operate to the extent of 100 tons at a time has proved most difficult, and the quantity could only be procured by buying it up in sundry small lots. The stock is chiefly held in a few strong hands, and that in itself, without respect to quantity, causes sales to be so limited. Unless the price advances there will be very little tin to be had, as holders are quite equal to the occasion, and it is certain that buyers will have to conform to sellers' rates. A considerable quantity out of recent purchases has been taken up before the expiration of the prompts, showing that there are some needy consumers, who either were waiting in expectation of the market declining, or having allowed their stocks to run low, have been disappointed in their expectation of being able to replace them at the lowest prices, and who will have to be continually coming into the market to satisfy these requirements. This, together with the demand from other quarters, will tend to stiffen prices, and operators will gradually gain renewed confidence, and manifest increased firmness. According to present appearance, what has recently taken place is the beginning only of an active enquiry, and a succession of important transactions. As we have already said, those who are deeply interested in this metal can well afford to bide their time. There is a healthy tone already prevailing, and higher prices have been obtained, and the prevailing tendency is to higher prices still. The market for English tin is much stronger, a large business having been concluded during the week at gradually rising prices, and stocks are much reduced. Stocks of foreign compare favourably with previous dates. The estimated reduction in Straits for the last month is about 200 tons, exclusive of the two last arrivals, which have not yet been taken into account. The stock of Banca tin in Holland is about 10,000 slabs less than at the same period last year, and about 60,000 slabs less than in 1868.

THE TIN TRADE.—During the month the value of this article in Holland has fluctuated considerably. The business, which has been very extensive, was chiefly for consumption. Messrs. Van Houten (Rotterdam, Jan. 31) report nearly the whole stock of Banca on warrants (now 29,025 slabs less than at same time last year, and 94,911 slabs less than in 1868) is in strong hands. The quantity offering is small, and further improvement is considered probable. Billiton tin, sparingly offered, can now be bought at 63½ ls. on spot, and 63½ ls. afloat; in Batavia, on Dec. 6, the sale of 5020 peculs (9400 slabs) was made at 70½ ls. per pecul. The position of Banca on Jan. 31 is thus shown by the Dutch Trading Company's official returns:—

	1870.	1869.	1868.
Import in January	18,229	8,719	8,211
Deliveries in January	18,200	17,800	6,580
Stock second-hand	49,548	78,678	144,459
Total stock	123,577	131,233	158,238
Stock of Billiton	7,500	788	12,400
Import in January	1,598	3,400	—
Delivered and shipped in January	1,598	3,400	—
Quotation 1 Banca	64½ ls.	67½ ls.	52½ ls.
Jan. 31 Billiton	65½ ls.	67½ ls.	61

These returns, compared with those of 1868 exhibit an increase of the import for January of 203 tons, a decrease of the deliveries for January of 131 tons; decrease of the stock second-hand of 907 tons, a decrease of the unsold stock of 668 tons, a decrease of the total stock of 239 tons, a decline of the quotation of Banca of 5½ per cent. The quantity of Banca tin now afloat for the Dutch Trading Company is 28,000 peculs, equal to 1750 tons, against 12,000 peculs, equal to 770 tons last year. We estimate the quantity of Billiton tin now afloat at 9149 peculs, equal to 570 tons.

THE COPPER TRADE.—Messrs. Pitcairn-Campbell and Co. (Liverpool)—Business transacted during the fortnight comprises, on the spot here, 112 tons bars at 66½ ls. to 66½ ls. per ton, 687 tons regulus at 13s. 1½d. per unit, and 2½ tons ingots at 69½ ls. 6d. to 71½ ls. per unit. To arrive here, 220 tons bars at 66½ ls. per unit. On the spot, Swansea, 371 tons regulus, 20 per cent. Canadian ore realised an average of 13s. 1d. per unit. Arrivals here during the fortnight from West Coast, S. A.:—Cordillera, from Valparaiso, 300 tons bars, 200 tons ingots, 150 tons Barilla; Aroquipa, from Guayaquil, 230 tons bars, 20 tons ingots. At Swansea, Lima, from Chanaral, 580 tons regulus; Glanville, from Talca, 68 tons regulus; Wm. Leckie, from Coquimbo, 600 tons regulus. Stocks of copper (Chilian and Bolivian) in first and second hands, likely to be available, are—Ores. Regulars. Bars. Ingots. Barilla. Liverpool 1127 3840 9412 1900 145 Swansea 3333 6260 1436 347 242

Total 4460 10,100 10,848 1847 890
Representing about 17,000 tons fine copper, against 11,400 tons Jan. 31, 1869; 8600 tons Jan. 31, 1868; 7800 tons Jan. 31, 1867.

Messrs. James and Shakspeare.—Small sales of regulus made by private contract at 13s. 1½d. at Swansea; the public ticketing there on Tuesday for ore went off at an average of 13s. 0½d. per unit, the average produce being 18½ per cent. In bars we have to note a gradual decline of about 10s. per ton, with few intermediate transactions, the lowest figure accepted being 66½ ls. for about 220 tons, of which one-half good ordinary regulus, the remainder Swansea brand; but there does not seem to be many sellers at the decline, and, as on previous occasions when similar prices were current, it is difficult to execute actual orders at the nominal rates. Some few small lots of Barilla and Wallaroo in second hands are reported at 73l. and 73½ ls. per ton, but the general demand is rather slack. With the exception of one or two moderate quantities of tough regulus, from Talca, 68 tons regulus, Wm. Leckie, from Coquimbo, 600 tons regulus. The direct imports of Chili into England during January were equal to 5702 tons pure; into Havre, 509 tons; and during the same period 516 tons of foreign copper from other countries entered the port of London, making together a total of 6728 tons. The charters advised from Chili during January were 4456 tons pure.

Messrs. Vivian, Younger and Bond.—In Chili bars the transactions have been limited to a few purchases of Urmeneta at 66½ ls., and of good ordinary brands at 66½ ls. 6d. and 66s. 10s. A cargo of regulus has been done at 13s. 1½d., and the Swansea sale went off at 13s. 1d. The demand for manufactured continues very indifferent, but for English raw copper out of second hands there is a fair enquiry. Fine foreign copper is rather slow of sale at our annexed quotations. The trade continues to buy only from hand to mouth, but, notwithstanding, the deliveries of all sorts of copper prove that the requirements continue to be very large.

Messrs. Henry Rogers and Co.—The charters advised from the West Coast for the first fortnight of December are somewhat lighter than usual, being under 1800 tons. The demand for bars is, however, limited, and at the moment only a fraction above 66l. can be obtained for any quantity. Reguluses are reported at 13s. 1½d. and 13s. 3d. In English very few transactions are reported; the demand has seemed less since the smelters' reduction than before. For India sheets there are no orders, though very large sales are reported by last mail. In fine Australian there is a moderate enquiry, at current prices. The market generally is quiet, but its tone firm.—Yellow Metal: Some makers are selling at extremely low prices, the demand being so slight.

TIN.—The upward movement in this metal, reported in our last, has continued, and we are now 6½ above the lowest prices touched since the reaction; the advance has been slightly checked from buyers not being so very eager to stock themselves, but great efforts appear to be making to improve the position of the article. Tin-plates are quoted 6d. to 1s. per box better, but we are yet some way off a good steady demand.

COAL MARKET.—The supply this week has been very small, only 50s. fresh ships having come forward. The mild weather has seriously affected the demand for house coals. We quote a reduction in price of 1s. per ton, at which an entire clearance has been effected.

Hartley's without change. Hettou Wallsend, 18s. 6d.; Haswall Wallsend, 18s.; South Hettou Wallsend, 18s.; Eden Main, 16s. 6d.; Hettou Lyons Wallsend, 16s.; Tunstall Wallsend, 8s. 6d. Unsold, 25 ships at sea.

The MINING SHARE MARKET opened with great excitement on Monday morning, and an enormous rise took place in several Welsh mines. The rise, however, was too rapid to last, and as it naturally brought in heavy sellers for cash, among those who could realise large profits, prices gave way in a day or two, and the market became steadier. Van shares, which at our last were 56 to 58, rose on Monday to 80, 85, representing an advance in two days of 250,000. On Tuesday the quotation was 82½ to 87½; on Wednesday they declined to 70, 75, and after various fluctuations, leave off 71 to 73. Van Consols opened 3½ to 4, and rose on Monday to 6. On Tuesday heavy transactions took place up to 6½. On Wednesday a very large number of shares, over 1000, were offered for sale on the Stock Exchange, and the price knocked down to 3½, 4. All the shares offered, however, were taken. On Thursday they opened 4½ to 5, then dropped to 3½; Friday opened 3½ to 4, and leave off 3½ to 4. Welsh Consols opened on Monday at 3 to 3½, with business done; but they afterwards partook of the general fever, and on Tuesday rose to 5, leaving off 4½ to 5. Bronfloyd shares advanced to 3½, 4½. In consequence of the extraordinary success of Van, and the increasing confidence in lead mines caused thereby, several new companies are about being launched for working mines, both in Wales and Shropshire.

The standard for copper ores advanced 17. 2s. per ton on Monday, and ere long more attention may be turned to Cornish mines, which of late have been comparatively neglected. The chief transactions in them this week have been in West Chiverton, East Caradon, Great Wheal Vor, Mary Ann, Grenville, West Frances, Providence Mines, Prince of Wales, Redmoor, and Crebore.

West Frances shares have advanced to 35, 40; the 108 is looking better, and a course of tin daily expected. Wheal Crebore, 12s. 6d. to 13s. 6d.; in the 120, east of Cook's shaft, in the cross-cut south, the wall of the lode has been intersected, and a branch, producing good ore, cut into. The mine has been in more request, at 17s. 6d. to 18s. 6d. Redmoor shares have been in more request, at 17s. 6d. to 18s. 6d.; the lode in the winze sinking below the 25 fathom level is worth 15s. per fathom; the stopes are worth 16s. Bedford Consols, 2½ to 3; Bedford United, 25s. to 30s.; Caldbeck Fells, 29s. to 31s.; Carn Camborne, 10s. to 12s. 6d. At Wheal Bassett meeting the accounts showed a balance against the adventurers of 6301l. 11s. 1d., and no call made. The prospects of the mine, on the whole, have improved since last meeting. Chiverton Moor, 4½ to 4; Chontales Gold, 17s. 6d. to 22s. 6d.; Cook's Kitchen, 11½ to 12½; Ding Dong, 18 to 20; Don Pedro, 3½ to 4; East Caradon, 6 to 6½; East Lovell shares have been firm, at 26 to 27; East Pool, 7 to 7½; East Grenville, 1½ to 2½.

Frank Mills, 3 to 4; Frontino and Bolivia, 4 to 1; Great Laxey, 16 to 17; Great Wheal Vor, 12 to 13; Marke Valley, 7 to 7½; New Lovell, 20s. to 25s.; New Seton, 30 to 35; North Crofty, 1½ to 2; North Treskerby, 13s. to 15s.; Prince of Wales advanced to 20s. 22s., and leave off 17s. 6d. to 20s.; Providence Mines, 34 to 36; South Caradon, 300 to 310; South Condurrow, 20s. to 25s.; South Crofty, 6 to 8; Taquaril, 16s. to 18s.; Tineroff, 19 to 20; West Chiverton, 6 to 8; Wheal Buller, 6 to 7; Wheal Grenville, 35s. to 40s.; Wheal Jane, 42 to 44; Kitty (Lelant), 12 to 13; Wheal Kitty (St. Agnes), 5½ to 5½; Wheal Mary Ann, 12½ to 13; Wheal Seton, 40 to 42; Wheal Uny, 2½ to 3; North Lovell, 5½ to 6; Pacific advanced to 2 prem., and leave off 11½ to 11½; Guerrero, par to ½ prem.; Great Rock, 9 to 10; a lode we hear has been cut into worth 3 tons of lead ore per fm.

The Market for Mining Shares on the Stock Exchange has again been particularly buoyant, especially in the early part of the week. Towards the close there was a relapse from the highest point, and the final closing is flat. Van shares have been the great centre of attraction; a very large business has been done in them, at an advance of 13s. above last week's price. The special reports on the mine, which are referred to in another column, prove that Van far surpasses any mine in England, or perhaps in the world, and much more than warrants the rise in the price of shares. There has also been a large business in Asheton, Tan-yr-allt, Van Consols, and several others of a more or less speculative class. In Pacific shares there has been a good amount of business doing; the late improvement has, however, brought in a few sellers, but the stock has been readily absorbed by the public, imparting a firmer tone to the market, which closes with a strong upward tendency. Don Pedro and Taquaril shares are better, while Frontino and Bolivia, Rossa Grande, and St. John del Rey are flat. The following are the closing quotations:—Van firm, at 72 to 75. West Chiverton, 56½ to 56½; Chiverton, 2½ to 2½; Chiverton Moor, 4½ to 4½; East Lovell, 26 to 26½; Great Wheal Vor, 12½ to 12½; East Caradon, 6½ to 6½; West Caradon, 1½ to 1½; Great Laxey, 16 to 16½; Marke Valley, 6½ to 7; Asheton, 15 to 15½; Tan-yr-allt, 11 to 11½; Van Consols, 3½ to 3½; Pacific, 11½ to 11½; St. John del Rey, 23½ to 24½; Don Pedro, 3½ to 3½ prem.; Frontino and Bolivia, 13 to 13½ to 15 to 15½; Taquaril, 16s. to 17s. 6d.; Anglo-Argentine, 1½ to 1½; Anglo-Brazilian, 1½ to 1½; General Brazilian, 1-16th dis. to 1-16th prem.; Pestarena, 1½ to 1½; Port Phillip, 1½ to 1½; Rossa Grande, par to ½ prem.; Yuda-namutana, 1 to 1½; Chontales, 1 to 1½.

IRISH MINE SHARE MARKET.—The new Russian Loan, which has been so successfully brought out in England and the Continent, allied even the heads of some of our own capitalists who wished to participate in the 2 percent. premiums at which it was marked from the first day of its appearance, and the natural consequence was that our most monied speculators neglected our more solid but, for them, somewhat old-fashioned home securities. Mining shares, of course, did not escape, but although business was extremely limited, prices did not suffer. Mining Company of Ireland shares (7½ paid) changed hands at 9½. 10s. cash. Of Wicklow Copper (2½. 10s. paid) a few shares have been secured at 8½. 10s., but the price finally asked was 8½. 12s. 6d. Cape Copper shares have made an upward movement of 3s. 9d., and in some instances of an additional 2s. 6d. per share, the closing quotation being 16½. 15s. Killaloe Slate Quarry shares sell at 16s., and are freely offered at 16s. 6d. Other mines are quite neglected for the present.

The following dividends were declared during January:—

Mines.	Per share.	Amount.
Devon Great Consols	£4 0 0	4,496 0 0
Wynndy Iron	0 2 0	4,000 0 0
East Wheal Lovell	2 0 0	3,812 0 0
Phoenix	6 0 0	3,000 0 0
Mining Company of Ireland	0 2 5	2,450 0 0
South Caradon	5 0 0	2,560 0 0
Marke Valley	0 5 0	1,820 0 0
Penhalls	0 4 0	1,200 0 0
East Darnley	4 0 0	1,200 0 0
East Pool	0 3 3	1,040 0 0
Bronfloyd	0 1 6	900 0 0
Wheal Jane	1 10 0	768 0 0
Wheal Kitty	0 18 0	768 0 0
Cook's Kitchen	0 6 0	726 0 0
Drake Walls	0 1 0	640 0 0
Bwlch Consols	0 2 0	509 8 0
Cwm Erida	0 10 0	438 10 0
Port Phillip	0 1 6	7,500 0 0
Total		£30,361 18 0

At Redruth Tackling, on Thursday, 2319 tons of copper ore were sold, realising 9559l. 14s. The particulars of the sale were—Average standard, 100½. 14s.; average produce, 7; average price per ton, 4. 6s.; quantity of fine copper, 162 tons 8 cwt. The following are the particulars of the sales during the past month:—

At the Swansea Tackling, on Tuesday, 1867 tons of ore were sold, realising 23,568l. 0s. 6d. The particulars of the sale were—Average

standard for 9 per cent. ore, 87½; average produce, 19½; average price per ton, 12½. 12s. 5d.; quantity of fine copper, 359 tons 8 cwt. The following are the particulars of the two last sales:—

At Phoenix Mine meeting, on Monday (Rev. Dr. Trefry in the chair), the accounts for the four months ending November showed a credit balance of 3657l. 4s. 6d. The profit on the four months' working was 3357l. 3s. 10d. A dividend of 8000l. (6l. per share) was declared, and 657l. 4s. 5d. carried to credit of next account. Capt. J. and W. Hosking reported upon the various points of operation. They have at present 39 tribute pitches, working by 110 men, at an average of 7s. in 11. The total number of men working underground, tutwork and tribute, is 275; and the total number (men, boys, and girls) employed in the mine is 537. The present position of the property is more fully referred to in another column.

TITAN IRON ORE.

RECENTLY DISCOVERED extensive TITAN IRON MINES, situated in the south part of NORWAY, between FLEKKEFJORD and EGERUND, are FOR SALE.

The distance from an excellent harbour is only 2000 yards. If desired, the ore can also, according to further agreement, be delivered free on board in Norway, or delivered in England.

For further information, please apply to Mr. AIGS HYSING, Flekkefjord, Norway.

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Mr. THOMAS B. LAWS, 22, Great St. Helen's, London, E.C. (the Secretary to the Company).

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A GRADUATE of the ROYAL SCHOOL OF MINES in BERLIN DESIRES an ENGAGEMENT. Has passed in Metallurgy, the Metallurgy of Iron, Machine Constructing, Assaying, &c. Speaks and writes competently English, French, German, and Italian, having resided several years (at colleges) on the Continent. No objection to go abroad.

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Principals and their solicitors alone treated with. Apply to M. GILROD STEWART, M.E., Laura House, Hanham, near Bristol.

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Crosby House, Bishopsgate-street, January 29, 1870.

In the Matter of the Companies Acts, 1862 and 1867, AND IN THE MATTER OF THE CAPE CORNWALL ST. JUST CONSOLIDATED TIN AND COPPER MINING COMPANY (LIMITED).

THE CREDITORS of the ABOVE-NAMED COMPANY are REQUIRED, on or before the 14th day of February, 1870, to SEND THEIR NAMES AND ADDRESSES, and the PARTICULARS of THEIR CLAIMS or DEMANDS, to CHARLES WARWICK, of No. 25, Bucklersbury, in the City of London, the Liquidator of the said Company, or, in default thereof, they will be EXCLUDED FROM THE BENEFIT OF ANY DISTRIBUTION made before such debts are proved.

ALEXANDER KERLEY, No. 28, London Wall, London (Solicitor to the Liquidator).

Dated this 18th day of January, 1870.

In Chancery.

IN THE MATTER OF THE COMPANIES ACTS, 1862 and 1867, AND IN THE MATTER OF THE SANKEY BROOK COAL COMPANY (LIMITED).

THE CREDITORS of the ABOVE-NAMED COMPANY are REQUIRED, on or before the 23rd day of February, 1870, to SEND THEIR NAMES AND ADDRESSES, and the PARTICULARS of THEIR CLAIMS or DEMANDS, and the NAMES AND ADDRESSES OF THEIR SOLICITORS, if any, to ISAIAH BOOTH, RICHARD HURST, and WILLIAM BROOK, all of Adelphi Bank Chambers, South John-street, Liverpool, in the county of Lancashire, the voluntary liquidators of the said company; and, if so required by notice in writing from the said voluntary liquidators, are, by their solicitors, to COME IN AND PROVE THEIR SAID CLAIMS or DEMANDS at the Chambers of the Vice-Chancellor Sir WILLIAM MILBURN JAMES, at No. 11, New-square, Lincoln's Inn, in the county of Middlesex, at such time as shall be specified in such notice, or, in default thereof, they will be EXCLUDED FROM THE BENEFIT OF ANY DISTRIBUTION made before such debts are proved. Friday, the 4th day of March, 1870, at Twelve o'clock at noon, at the said Chambers, is appointed for hearing and adjudicating upon the debts and claims.

SHARPE, PARKERS, and PRITCHARD, 41, Bedford-row (Agents for M. W. Peace, of Wigan, Lancaster, Solicitor for Liquidators).

Dated this 21st day of January, 1870.

ZINC AND LEAD ORES.

TARIFF FOR THE PURCHASE OF BLENDE

(SULPHURET OF ZINC).

Price current at the London market for a ton of spelter, common brands, during the month of the delivery of the ore.	Price of a ton (20 cwt.) of blende, delivered f.o.b. at Antwerp, and containing 50 per cent. of zinc.	Variations of the foregoing prices for every 1 per cent. of zinc, more or less than 50 per cent.
£19 19½ 20 20½ 21 21½ 22	£1 0 5 4 4 3 4 8 1 4 11 11 4 15 9 4 19 7 5 3 5	3s. 2d. 3 3 3 4 3 5 3 6 3 7 3 8

Independent of the above mineral, I also BUY at HIGH PRICES:—

1.—RAW or CALCINED CALAMINES, including the most impure.

2.—LEAD-SILVER ORES of every kind, and more especially those which are reputed very difficult to smelt.

3.—MIXED ORES (raw), containing blende or calamine, combined with lead ores.

4.—ZINC or LEAD SULPHATES, oxides, scoria, ashes, and every other analogous substance.

I am in the POSITION to BUY every year about 30,000 tons of zinc ores, 15,000 tons of lead ores, 10,000 tons of mixed ores, and I can contract for as many consecutive years as may be desired.

I offer to sellers every guarantee they may be pleased to stipulate.

Apply to—MR. ARMAND FALLIZE, Ingénieur à Liège, Belgium.

LEAD ORES.

Date. Mines. Tons. Price per ton. Purchasers.

Jan. 18—Caldbeck Fells..... 10 £12 12 6 Stock and Co.

— ditto 95½ 2 14 0 John Warwick.

28—Great Laxey..... 100 22 11 0 Sims, Williams, & Co.

—Wheal Trelawny 53 24 0 0 Stock and Co.

29—Chiverton Moor 60 17 7 6 Sims, Williams, & Co.

— ditto 10 10 15 6 Trefry's Trustees.

—Bwlch Consols..... 50 15 2 0 Sims, Williams, & Co.

—Bradford Consols..... 80 12 0 0 Walker, Parker, & Co.

Feb. 1—Silverstones 20 12 8 6 Barry Port Company.

2—Minera Union 16 12 11 6 Adam Eytton.

BLLENDE.

Date. Mines. Tons. Price per ton. Purchasers.

Feb. 2—Minera Union 5 £3 10 0 S. Kenrick and Son.

BLACK TIN.

Date. Mines. Tons. Price p. ton. Amount. Purchasers.

Jan. 27—Great Wheal Vor 33 10 0 5 £2220 7 3 —

—Rosewell Hill 2 1 2 17 £25 10 0 590 0 9 —

29—Wheal Uny 8 12 1 22 £4 15 10 253 13 0 —

—Wheal Buller 6 3 2 23 — 390 10 6 —

COPPER ORE.

Date. Mine. Tons. Price per ton. Purchaser.

Jan. 24—Caldbeck Fells..... 5½ £18 0 0 J. Bibby and Co.

— ditto 6¾ 8 14 6 ditto

COPPER ORES.

Sampled Jan. 12, and sold at Swansea Feb. 1.

Mines. Tons. Produce. Price. Mines. Tons. Produce. Price.

Cape Ore 58 30½ £19 10 0 Moonta Silime 73 12¾ £8 5 0

— ditto 58 30½ 19 10 6 ditto 75 12¾ 7 19 0

— ditto 58 30½ 19 10 6 ditto 100 12¾ 3 0 6

— ditto 56 3½ 19 10 6 ditto 48 12¾ 3 0 6

— ditto 60 33¾ 21 12 0 Knockmahon 104 9¾ 5 17 6

— ditto 60 33¾ 21 8 6 ditto 92 9¾ 5 17 6

— ditto 58 34 21 10 6 ditto 103 8¾ 5 7 6

— ditto 58 33¾ 21 10 6 Lisbon Ore 69 18¾ 12 0 0

— ditto 58 33¾ 21 19 6 ditto 35 18¾ 12 7 6

— ditto 27 28¾ 17 12 6 Tebaddella 32 17¾ 11 7 6

— ditto 27 28¾ 17 12 6 ditto 31 17¾ 11 7 6

— ditto 48 35¾ 23 8 6 ditto 4 10¾ 6 12 6

— ditto 38 34¾ 22 10 6 Copper Ore 38 6 3 4 6

— ditto 42 28¾ 18 5 6 Copper Slag 15 16¾ 10 1 0

— ditto 28 35¾ 23 2 6 Australian 11 9 5 7 0

— ditto 9 28¾ 19 17 0 Slag 59 ¾ Not sold.

— ditto 18 28¾ 13 2 6 Copper Reg. 3 43¾ 27 12 0

— ditto 9 35¾ 23 4 0 Precipitate 2 63¾ 43 8 6

— ditto 3 30¾ 19 13 6 Copper Reg. 41 17¾ 11 9 0

— ditto 88 6¾ 3 9 0 Copper Precip. 8 13¾ 11 18 0

— ditto 87 6 3 9 0 Copper Ore 7 13¾ 8 5 0

— ditto 20 6¾ 3 9 0 Copper Reg. 13 13¾ 8 15 6

Cape Ore 771 £16,144 8 6 Australian Ore 11 £ 58 17 0

Moonta Ore 488 2,545 18 0 Copper Regulat. 3 82 16 0

Knockmahon 299 1,705 2 6 Precipitate 2 86 19 0

Lisbon Ore 104 1,361 8 6 Copper Regulat. 41 453 1 0

Tebaddella 67 744 13 6 Copper Precip. 7 94 0 0

Copper Ore

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Notices to Correspondents.

PRACTICAL SMELTING.—Will any of your subscribers tell me, in next week's Journal, what fluxes are used for smelting argentiferous pyrites? Are they desulphurised first? What will destroy iron, or the pyrites, used in conjunction with flux? What form of furnace is used? If cupel furnace, what is the hearth to be made of? Is there a book published treating of the matter?—AN AUSTRALIAN.

BORING MACHINES.—Will any reader kindly inform me of the best machine for boring an adit in a copper mine, and to whom I am to apply for one? I think I saw an advertisement in the Journal relative to such, but cannot now find it.—J. M.: Dublin.

FRONTINO AND BOLIVIA GOLD MINING COMPANY.—Can any of my fellow shareholders give me a reason why our shares, with 38s. 6d. paid, are selling at 18s. to 20s.? When fallacious promises were built up on groundless promises the returns were little better than nil, while the monthly cost was double what it is at the present time. The monthly return of gold more than covers the expenses, notwithstanding a large amount is being expended to further develop the property, and also the reducing power. In the face of these manifestly favourable features, the shares in the market are at a discount. How is this?—ORIGINAL SHAREHOLDER: Feb. 1.

THE MINING JOURNAL,
Railway and Commercial Gazette.

LONDON, FEBRUARY 5, 1870.

PROTECTION FOR FREE COLLIERY LABOUR.

It may well be hoped that we are not next week to have in Yorkshire a repetition of that which not long since occurred in North Wales. At present there is an unpleasant similarity between the conduct of the collier rioters at Mold and those at Thorncliffe as to their behaviour during the preliminary magisterial proceedings connected with the examination of the offenders in either case. Thanks, perhaps, to Lord WHARNcliffe's vigorous action on the day after the riot at Thorncliffe, the local magistracy and the police seem to be now a little more sensible of what they can, and what they cannot, accomplish unaided by the imperial forces. Haze, too, appears to be shifting away as to the power possessed by magistracy and troops, and their ability to act separately or together in the preservation of peace.

The West Riding magistrates, who assembled on Wednesday in the Court House, Barnsley, to determine what measures should be adopted for preserving the peace during the examination of the rioters next Monday, acted wisely when they determined that the military should be doubled (there being two companies instead of one), that the police force should be increased, and that other measures for the preservation of order should be adopted. This, doubtless, is as it should be; and the issue we have little doubt will be that the majesty of the law will be upheld. Writing, however, in the interest of the industry most affected by the turbulent proceedings at Thorncliffe, and having a care that pit proprietors and pit men should be able to negotiate without hindrance the terms upon which they will work together, we complain that such preparations as have now been made should be required. They never would have been required if Messrs. NEWTON and CHAMBERS, and the colliers who are willing to serve them, had received that protection from the authorities which should have been afforded them. The law should be a terror to evil doers. Until now it has not been all that in and about the district embraced in the recent riots. A mistaken leniency has marked the punishments visited upon individual offenders in cases of what may be termed incipient rioting.

Violence and threatening, sustained by non-Unionists before the outbreak, if they had been followed by that rigour which people who indulge in such conduct can alone understand, would not have grown to the head which they at length assumed. It is not sufficient that such offenders be lectured from the Bench, and then fined, or awarded an otherwise hardly more than nominal punishment. Such a course, prompted unquestionably by the kindest feelings on the part of magistrates, and with the belief that they will probably decrease existing rancour, it is clear not only by what has just now happened, but by experience in other cases, will not accomplish the purpose designed. Much more authoritative respect must be shown to the claims of employers and employed to protection when they have agreed to work together upon terms mutually satisfactory, however displeasing such terms may seem to operatives who refuse them. In the hope that what has happened at Thorncliffe may not be repeated in the case of any other similar dispute elsewhere, we have felt ourselves constrained to dwell again upon this phase of the Thorncliffe disaster. Wherever there has been resolution on the part of the authorities that the first appearances of evil shall be determinedly met, there the threatened mischief has been stopped, and the liberty which with the progress of modern legislation should receive even growing respect has been preserved. It is, therefore, in every respect a mistaken kindness to display leniency in such cases.

That other occasions may arise for such a course to be taken by magistrates as that which, in the name of capital and labour, in the winning and working of the minerals of Great Britain, we now demand, is patent from the existing facts. Not only are the free labour men who remain in Messrs. CHAMBERS's service more than heretofore determined that they will not submit to the tyranny of their own order, but an increasing number of colliers are willingly accepting the terms with which the Unionists are dissatisfied. This feature in such disputes will become more conspicuous with the progress of education and the consequent increasing respect of the operative class. We will not stay here to remark upon the assertion which is being made with some show of authority, that four of the men in custody are Unionist committeemen, however strong may be the temptation to show that the fact bodes but little comfort for those who look for the preservation of peace between capital and labour from the fancied educational advantages of such organisations. Ra-

ther, having urged the vast importance of resoluteness in checking with rigour the first attempts at illegal compulsion in the matter of free labour, we would go on to wish that most thorough success may attend any effort made to improve the relationship which now exists not only between Messrs. CHAMBERS and Mr. HUNTSMAN and their late workpeople respectively, but that likewise which is seen in regard to some other firms and their men. Many enough attempts have been put forth to bring the colliers and the proprietors to an agreement at Thorncliffe and at the Tinsley Park and Manor Pits; but hitherto they have been unsuccessful. Now, however, we rejoice to see that arrangements have been commenced by an independent authority, in the hope that by-and-bye there may exist at the collieries of Mr. HUNTSMAN a similar capital and labour relationship which is now effecting so much good to both sides at the Whitwood Collieries of Messrs. BRIGGS.

Mr. ALFRED DAVY, of the firm of DAVY BROTHERS, engineers, Sheffield, has met Mr. HUNTSMAN's men, and he has also seen Mr. HUNTSMAN and Messrs. BRIGGS, all of whom are long-standing friends of his. At an interview which he had with Mr. HUNTSMAN's men, on Tuesday, Mr. DAVY intimated the readiness of Mr. ARCHIBALD BRIGGS and himself to mediate, with a view ultimately to introduce the system at Tinsley Park and the Manor Pits which Messrs. BRIGGS and their colliers are working out at Whitwood. Mr. DAVY received the authority of Mr. HUNTSMAN's late colliers to seek a formal interview with Mr. HUNTSMAN, whilst they, on their part, intimated their readiness to consult the general feeling of the men at a special meeting to be called for the purpose. How far Mr. HUNTSMAN is likely to sympathise with any desire on the part of his friends that what Messrs. BRIGGS are doing may be accomplished by him likewise we have no authority for any statement, one way or the other. For all we know, the matter may seem to him altogether impracticable at the Tinsley Park and Manor Pits; he may be satisfied with what the men who are working for him are doing, and he may not care to make any change. Then, the men who are out may not be prepared to do that which Messrs. BRIGGS's men have done to bring about the arrangement which now exists. But we are certain that Mr. HUNTSMAN will put no impediment in the way of any practicable arrangement which may tend to the restoration of peace.

[We are glad to learn that an amicable arrangement has been arrived at. Mr. HUNTSMAN has consented to a partial employment of the old hands on the same terms as those now engaged, and others as opportunity offers. Conciliation thus becomes possible, without change in management, or humiliation on either side.]

MODERN BLAST-FURNACE MANAGEMENT.

The foremost men in the iron trade who are engaged in the manufacture of pig-iron continue to direct their attention to the very important operation of the heating of the blast. The apparatus most approved, and with which the leading experiments are now being made, are the stoves of fire-brick, of which Mr. COWPER is the patentee; and the modification of these stoves, which Mr. WHITWELL has patented, and has at work at the Thornaby Iron Works, Stockton. An authority upon blast-furnace work is Mr. CHARLES COCHRANE, of Dudley, and of the Ormesby Iron Works, Middlesbrough. At the Middlesbrough Works that gentleman has been using the first-mentioned stoves, and in the behoof of the scientific advancement of the iron manufacture of Great Britain he is making known his experience.

In the construction of Messrs. COWPER and SIEMENS's furnace a strong wrought-iron casing is first made thoroughly air-tight, about 20 ft. in diameter, and 25 ft. in height. This is lined with a wall of fire-bricks 18 in. in thickness, which thus leaves a clear circular space of about 17 ft. in diameter, and 22 or 23 ft. high. A hollow column of brickwork, 9 in. in thickness, and 5 ft. in diameter, is then built up in this central space, and the distance between the 9-in. wall and 18-in. wall filled up with fire-bricks loosely set, almost in the same manner as in clamp burning, but with rather wider spaces between brick and brick. The action is as follows:—The waste gas is in the first place passed from the blast-furnace into the central hollow column, and there it is ignited by admixture with atmospheric air; thence it is made to pass down through the loose bricks, and gradually these, by absorbing the heat of the ignited gas, become themselves red-hot. When this is observed to be the case, through the eye-hole provided for the purpose, the gas is shut off, and in its place the blast is turned through the oven, but in a direction the reverse of that by which the gas entered. In passing in contact with the red-hot bricks the blast itself becomes red-hot, and in that state passes into the furnace, at a temperature of from 1500° to 1800°. The result is a very great saving of fuel—from 4 to 6 cwt. of coke to each ton of iron produced. Of course, there must be two ovens, one being heated by the gas, whilst the other is delivering its stored up heat with the blast into the furnace. In their working originally the dust which passed with the furnace gases into the stoves was found to be exceedingly prejudicial, as it choked the small spaces between the loose bricks, and eventually prevented the blast from passing through the oven. Various arrangements have been found necessary in order to obviate this difficulty. To strain the dust from the gas Mr. COCHRANE has caused it to pass over a large number of properly placed iron trays, which to a great extent accomplishes the object sought.

Mr. WHITWELL believes that his modification secures equal heating powers at very much less cost. It is hoped that the trade will have an opportunity of a discussion of the merits of the two upon an early day. The feeling of the leaders of the industry in the present day is decidedly in favour of high initial temperatures, which there is every reason to believe do not deteriorate the quality of the iron.

CORNISH ENGINES.—INCREASED CONSUMPTION OF COAL.—Mr. T. LEAN, the Reporter of the Duty of the Cornish Engines, sends us a table in corroboration of the fact that from the period when the work performed by the Engines was commenced to be publicly reported, in 1811, there was a continuous improvement up to 1843, when an average performance of 67 millions of lbs., lifted 1 ft. high, by the consumption of 112 lbs. of coal, was reached. Since 1843, there has been an equally continuous retrograde course,—so that at this time the average "Duty" of the engines has fallen off about 26 per cent. Or, to put it in other words, at this time full one-quarter part more coal is consumed by the engines, on the average, than was necessary in 1843 to do the same work—an item of no small importance, especially in such a period of depression as the mining interest has been passing through. Table of the average "Duty" performed by the Cornish engines, per 112 lbs. of coal, at the end of each period of five years, commencing with 1811:—

Year.	Duty.	Year.	Duty.	Year.	Duty.
1811	.....Millions 27.4	1835	.....Millions 56.9	1855	.....Millions 54.8
1815	.....28.4	1840	.....64.8	1860	.....51.6
1820	.....34.1	1845	.....67.0	1865	.....50.2
1825	.....38.1	1850	.....68.1	1870	.....50.2
1830	.....51.6	1855	.....61.8		

TEMPERATURE OF COAL MINES.—In the Supplement to this week's Journal we have inserted a paper by Mr. EDWARD HULL, read at the Royal Society, which contains some important observations on the Temperature of Coal Mines, from experiments made in the Rose Bridge Colliery, Wigan. By this interesting statement it will be seen that the Astley Pit, at Dukinfield, which has for a long time ranked as the deepest in England, must now give way to the Rose Bridge Mine, which is stated to be certainly the deepest in Britain, and probably the deepest in the world. A depth of 808 yards has been reached, and at this point the temperature in the coal was found to be 93° Fahr. The last observation made in the Astley Pit, when it had reached its full depth of 717 yards, was 75° Fahr. During the recent experiments while the temperatures of the strata were being measured, observations were also carried on in the open pit, and it was found that the temperature of the strata augmented more rapidly than that of the open pit. The investigations are of general interest, and will prove of much scientific value.

INDIAN COAL.—It is understood that Dr. Oldham's opinion of the Chanda coal is that, although the trial made of it has not secured much favourable testimony, still the work of seeking for better coal should be continued. The specimen already tried by one of the In-

dian railway companies is 6 per cent. worse than Raneegunge coal, and still more inferior to English coal. The beds bored at present are of very limited thickness, but one favourable circumstance has been established as regards Chanda coal—that it burns clear.

STEAM-POWER AT HALF-PRICE.

The economic production of motive-power is of so much importance in connection with manufacture that any real improvement in the steam-engine is sure to attract a large amount of attention, and secure an ample amount of remuneration to its inventor. The Warsop aero-steam engine, to which reference has several times been made in the Journal, has now been thoroughly tested, by submitting it to a long series of comparative trials, and the result has been to place the reality of the improvement almost beyond question. The essential feature in the arrangement consists in adding an air-pump to an ordinary high-pressure engine, and therewith forcing heated air into the boiler below the water level, the object being to break up the water, and thus expose an additional surface to the action of heat, and at the same time utilise heat now wasted. As the aerating apparatus can be put out of action instantaneously by simply turning a tap, the facilities for making comparative trials, and thus ascertaining the advantages or otherwise of the system, are very great. These facilities have been taken advantage of in all the experiments made.

The result has been most satisfactory. The Royal Agricultural Society's rules were adopted—the experiment was always commenced with a boiler pressure of 50 lbs., and the fuel was deemed exhausted when 90 revolutions of the engine could not be maintained. The same quantity of coal—120 lbs.—was used in each case, and the results obtained were—Duration of experiment, 153 minutes with steam and air; 112 minutes with steam only; number of revolutions of brake 15,433 with steam and air, 10,500 with steam only; average number of revolutions per minute 100.80 with steam and air, 93.75 with steam only; gross horse-power of useful work done during experiment 965.90 with steam and air, 657.22 with steam only; average horse-power of ditto 6.31 with steam and air, 5.86 with steam only; and pounds of water consumed for each pound of coal burnt 8.37 with steam and air, and 6.13 with steam only. The experiments would, therefore, appear to show that the economy of the Warsop system is equal to 47 per cent. as compared with the ordinary system of working.

PREVENTING ACCIDENTS IN MINES.

Shaft accidents have always been a serious source of fatality in connection with colliery operations, and although the various safety-cages which have from time to time been introduced have no doubt tended somewhat to diminish the loss of life, they are still very heavy as compared with those in other parts of a mine. Inadequate arrangements for signalling are doubtless the cause of many accidents, the difficulty being, not in ascertaining that a signal has been made, but in determining whence it proceeds, and the instructions it is intended to convey. To remedy this evil an improved apparatus has been patented by Mr. GEORGE MUSGROVE, of the Pelton Colliery, Durham, which is chiefly intended for indicating signals passing between the top and bottom of pits and shafts, the indications being given by two or three separate contrivances, in so distinct a form that it is impossible for the engineman or other attendant to mistake the signal given. The apparatus has a face similar to a clock face, which is numbered according to the number of signals from the top or bottom of the pit or other place. The apparatus has also a hammer, which falls upon a plate; also a bell in the interior, which gives one stroke for each signal. To the ordinary single wire or cord is attached by a lever, spring, crank, or other suitable contrivance a wire, on which are two knobs or tappets. When the signal wire is raised the tappets lift a double eye, and thereby release a catch or spring in the hammer, allowing the hammer to fall on the plate; in falling, the hammer, by means of a slotted rod or otherwise, raises a paul or catch from a ratchet wheel, on the spindle of which the pointer of the clock face is fitted; this wheel is then moved by a spring the distance of one tooth, together with the pointer, when it is again held by the paul; in this movement one of a series of pins on the ratchet wheel presses upon an arm or paul, which through the intermediation of a rod and spring causes the bell to strike; this striking of the bell takes place once for every time the wire attached to the signal wire is raised. When this wire resumes its normal position on the completion of each signal the double eye falls back to its former place, where it remains until the wire is again raised by the sending of another signal. The hammer which falls on the plate is raised by a weight, or block, or catch, connected to the engine, and as it regains its place the pointer springs back to its normal position. When the hammer is up it cannot be lowered, except by the raising of the signal wire, and the pointer cannot be made to point to any number on the clock face until the hammer is lowered. Either the hammer or the bell may be dispensed with, and the details of the apparatus are in other respects capable of modification. The signal appears to be very simple, and not liable to get out of order, whilst the price at which it could be put into a pit would be so low as to be no obstacle to its general introduction.

UTILISATION OF SMALL COAL.

The manufacture of compressed fuel has been developed chiefly by Belgium, France, Great Britain, and Prussia, and, although it is only about 10 years since the manufacture assumed any importance, it has during that period rapidly extended in Belgium and France, and it is destined to become of much greater importance in the future. Compressed coal is also prepared in England, but almost exclusively for exportation. For a long time the fine and dust coal, the "slack" or "waste" of collieries, had no practical value, and it accumulated to such an extent as to be an encumbrance, and to hinder the work of extraction and delivery. Now, all this material might be turned to profit by compressing it into bricks or cakes of a size convenient for burning.

Some of the advantages attending the use of pressed coal may be cited. Its purity and compactness adapts it to the rapid production of steam in furnaces with small fire-grates, and it is, therefore, a desirable fuel for steamers and locomotives, for which it is largely used. Being manufactured in prismatic forms it can be very compactly stowed on ship-board or elsewhere. It can readily be transported to great distances with very little waste, amounting, it is stated, to less than 1-10th the wastage of ordinary coal handled under similar circumstances. It is not injured by frost or rain. Bricks of pressed coal produce as much steam in locomotives as an equal weight of coke. It is much liked by the firemen, especially for raising the steam in ascending heavy grades.

The use of some cementing or agglutinating material is almost a necessity, and the materials suitable for the cement are not numerous. A good cement must be free from incombustible matter, so that the quantity of ashes will not be increased; it must cause the particles to adhere strongly, and it must be cheap. Many materials, such as clay, damaged flour, lichen and tar, have been tried experimentally, but so far the pitch manufactured from coal tar has alone been successfully used. It is used as "dry" or "short pitch," and as "fat" or "heavy pitch." Tar does not answer the purpose. It mixes well with the coal, and the mixture is easily formed into bricks, but they do not stand the fire well; they melt, crumble, clog the fire-grates, and give off quantities of smoke. The pitch which is used may be regarded as tar which has been concentrated by heat, and has thus lost all its heavy and light oils. Fat pitch may be regarded as a coal tar from which 25 per cent. of volatile matter has been expelled, and dry pitch as the same after the expulsion of 40 per cent. The fatter and richer the tar or pitch is in volatile matters the more liable the coal bricks are to soften and smoke in burning.

Soft bituminous coals, or mixtures in which they predominate, are generally used in the manufacture of pressed coal. These soft coals can be more easily moulded, and they furnish a greater amount of fine dirt, which can be had for very little at the mouths of the mines. Smithy coal does not furnish much fine or dirt at the mines; besides the fine can be used alone on the grates, where it agglutinates itself and makes good coke. The anthracite coals are also appropriate for being agglomerated. The pressed coal bricks made from them are

very solid, can be easily moved, but do not stand the fire so well. They burn well, but slowly, and remain in good shape on the hearth if they are not stirred up; but if it is necessary to have a bright fire, and if it is frequently stirred, the poker breaks down the pressed coal bricks, and causes them to fall into dust. Different mixtures of glance coal and anthracite have, nevertheless, been tried in France with satisfactory results, superior to those obtained by the combustion of different coals not agglutinated together. This will be easily understood, for in these mixtures bituminous coal furnishes the agglutinating material, and anthracite, so rich in carbon, gives a greater heat. The use of anthracite coal dust for bricks will be subsequently considered.

The coal of some mines has not the qualities requisite for perfect agglomeration. If it is used alone the bricks are inferior in quality, and will not bear transportation to a distance. In such cases the bricks are generally made of small size, adapted to domestic purposes, and are sold for use near the place of manufacture. Ordinarily, however, these inferior coals are mixed with the dust of the better pit coals, and pressed into bricks, which can be sent great distances without injury, and can be profitably used for all industrial purposes. Whatever may be the quality of coals, if they are intended for the use of railroad companies and metallurgical establishments, it is necessary to reduce the quantity of ash as much as possible, and, therefore, it is necessary to wash the combustible material with the greatest care. This is every day becoming a more important matter. The close competition among the manufacturers of pressed coal leads them to constantly study to obtain the best processes for washing, and the best automatic machines to perform this work.

LEAD MINING IN SHROPSHIRE.

A few weeks ago we called public attention to the value and importance of the rich lead mining district of Western Shropshire, which is usually known, from the name of its oldest and greatest mine, as the Snailbeach Lead Mining District. We pointed out that this rich and important district, which has unaccountably received little public attention during the last few years, although situated locally in Shropshire, is really geologically to be considered as a portion of the great and successful lead mining district of Montgomeryshire, on the boundary of which county it immediately abuts. In fact, nothing can be more striking than the geological analogy between the lead district of Western Shropshire, lying between the picturesque ridge of the Stiperstones and the low range of the Shelve Hill—a width of little more than two miles, and about six miles in length—and the Montgomery lead district. In both the lodes occur in clay-slate of absolutely the same geological characteristics, which is traversed by greenstone (or ironstone elvans) dykes, and great bands of carbonaceous shale, to the correlation of which may be distinctly traced the occurrence of those gigantic deposits of lead ore which equally characterise both districts. Indeed, these two districts may be distinguished from all other lead mining districts in the United Kingdom by the great bodies in which lead ore is found in each. In the other lead districts of the country, such, for instance, as in the counties of Cornwall and Cardigan, very excellent lead mines are met with, but the ore occurs more disseminated, or drawn out, as it were, so that to raise an equal quantity of ore probably ten times as much ground has to be opened out and explored. Some of the greatest lead mines of Cornwall are said to have yielded an average return of little more than 4 ton per fathom; and the reports of the leading Cardiganshire mines, published weekly in the Journal, show that their produce varies from 10 cwt. to an average maximum of 2 tons per fathom, while the Snailbeach district, taken at a minimum, may be said to have yielded from 8 to 10 tons per fathom.

We have already referred to Snailbeach Mine, adjacent to which is the scarcely less celebrated Perkin's Beach Mine, and the newer, and now a greatly promising, Central Snailbeach Mine, which has been at work about eight years. Its engine-shaft workings are close to the Crow's Nest, on an east and west lode, about a mile in a northerly direction from Perkin's Beach, and the purchase of the maiden ground to the south of these workings, known as the Hill sett, has been most fortunate for the Central Snailbeach Company. Before 2000, could have been expended on it in actual mining operations the company raised ore, now to be seen at grass on one of their veins in Mytton Beach, adjacent to the boundary and working of Perkin's Beach Mine; and, consequently, attention will also now be directed to the vigorous development of this portion of the Central Snailbeach sett, as with sound management and ordinary patience there can be no doubt of a profitable result.

Perkin's Beach Mine has passed into the hands of a joint-stock company, called the "Perkin's Beach Mine (Limited)." The directors are—Sir Edward S. Walker, Bart., Berry Hill, Mansfield, Notts—Chairman; and Messrs. William Urwick, Ludlow Castle, Ludlow, and S. Harley Kough, Shrewsbury and Church Stretton. The required capital has been privately subscribed. The vigorous operations commenced by Mr. Harley Kough about six months since have already resulted in the discovery above the middle adit level in new ground, north of any formerly worked, of two valuable leaders of ore—one 15 in. wide, the other 4 in.—which it is believed will ultimately join, and may lead to the run of the Big surface ore (which have been heaved and lost above), from which immense returns, with equally large profits, were made in the first twelve months of the original opening of this mine. Tramways are being laid in the middle level with all speed to get the ore on the dressing-floors.

This company has commenced driving by nine men south from Cross's vein to the great spar vein, which will be intersected in a few months. The backs on this vein will exceed 150 yards. This great spar vein is one of the champion lodes parallel to that of Snailbeach, and shows similar characteristics. The costeaning on its surface produces rich samples of ore, now to be seen at grass. In every department of Perkin's Beach Mine the works are progressing with vigour, and with most favourable results.

Adjoining Perkin's Beach on the west is Ovenpipe Mine, which since our article on the 1st ult. has been purchased for a large sum of money. This mine is reported to have increased in value within the past three weeks very considerably.

In our former article we referred to the great success of the Stiperstones Mining Company, whose returns are now over 12000, a month. One of their mines is Pennerley, from which at present nearly the whole of these returns are made, and the recent addition to their sett of the Potter's Pit Mine must increase the yield of ore. The famous Old Bog Mine, also on the property of this company, is being rapidly opened out with great promptitude and energy, by all the aid that can be obtained from the most approved modern mechanical appliances. When these operations are completed, which is expected will shortly be the case, the returns to the shareholders from this mine may be expected to equal, if not indeed exceed, those derived from Pennerley and Potter's Pit; so that, with three mines making such returns as Pennerley, Bog, and Potter's Pit, the property of the Stiperstones Mining Company may be expected ultimately to rank among the greatest and most profitable lead mining concerns in the kingdom. Immediately adjoining the Stiperstones property to the south is the highly promising mine called the Rook House. This mine is worked by a Leeds Company, called the Leeds Rook House Mining Company, who have already raised and sold ore. A fine lode has been opened on close under the Stiperstones, and there can be little doubt that with vigorous working, and a proper expenditure of capital, this mine might be made to take a prominent place amongst Shropshire lead mines.

The Roman Gravels Mine, on the immense antiquity and great productiveness of which we commented in our former article, affords one of the most striking instances of the great similarity which exists between the mode of occurrence of the great courses of ore in this district and that of the Van Mine. As in Van, the great course of ore in Roman Gravels, which is worth many tons to the fathom, skirts a band of black lustrous shale, with which it is in evident correlation; and, indeed, the occurrence of this shale in connection with the veins gives, in our eyes, its great value to the Shropshire district. The Roman Gravels Mine is worked by a private company, the shares being held almost entirely in Shrewsbury; indeed, nearly all the Shropshire mines are worked by individuals or private companies, the Shropshire district being so rich and so little speculative that the aid of the capital of the general public is rarely enquired or sought

for. Closely contiguous to the Roman Gravels on the south are the great and extensive mines known as the White Grit and Lady Well Mines, also on the property of Mr. Jasper More. These mines formerly made immense returns, and still possess an enormous extent of virgin and untried ground, which will yet beyond doubt be productive of great lead mines. The Lady Well already promises good results. In conclusion, we can only say, in the interest of the public itself, we hope to see it give more attention to the Shropshire or Snailbeach mining district, which, as already stated, is really to be considered as a portion of the great lead district of Montgomeryshire.

REPORT FROM THE NORTH OF ENGLAND.

Middlesbrough, Feb. 3.—There is little change to note in the state of trade during the past week. The various works of the district appear to be steadily employed, and, according to report, are mostly fairly supplied with orders. Rail makers are generally busy, and anticipate even occupation in their works during the present year, notwithstanding the almost certainty of fewer Russian orders this season than last; but this deficiency, it is expected, will be recompensed by the greater home demand. Shipbuilding remains active, and consequently iron for this department of northern commerce is in good request. Prices have of late shown indications of improvement, and from the reported recent influx of orders rates may naturally be expected to be at least firm. Bar-iron mills are in most cases tolerably well off for work, although for certain classes of bars some makers are but slack. Pig-iron prices maintain firmly the late advances, though quotations on Tuesday's market here were not quite so regular and even as at the previous market. The demand is reported good, and current list prices are not expected to give way in the least. Makers' stocks are expected to show a still further reduction during January, when the returns for the month are issued, which will be in the course of a few days. Warrants are quoted at 49s. 6d. to 50s., cash; business quiet. An interesting ceremony took place at the close of the market. The bust of the late Mr. John Vaughan, which has been subscribed for by the friends of the deceased gentleman connected with the local trades, was unveiled in the presence of a large gathering, in the spacious hall of the Middlesbrough Exchange, in the north-east corner of which the memorial has been placed. The bust has been executed by Mr. Simmonds, of Rome, but there is a difference of opinion as to the faithfulness of the representation. There is, doubtless, a strong likeness in the bust, which is placed on a marble pedestal, bearing the name "John Vaughan." The members of the Middlesbrough Town Council, preceded by the Mayor, and an escort of police, marched to the Exchange about noon, and to the considerable number present Mr. Isaac L. Bell made some touching and appropriate references to the memory of the late much respected gentleman. The bust was uncovered by a granddaughter of Mr. Vaughan, and Mr. Thomas Vaughan briefly, and with emotion, thanked the ladies and gentlemen for their kind presence, and tendered his thanks also to the subscribers to the memorial. Mr. Bolekow, M.P., Mr. Dodds, M.P., Mr. Isaac Wilson, and Mr. J. Jennings (secretary to Bolekow, Vaughan, and Co., Limited), also took part in the proceedings. A general subscription is, we understand, about to be commenced, for the purpose of founding in Middlesbrough some more fitting memorial to one who has done so much to make this great and important district of Cleveland what it is.

The strike by the ironstone miners, which was apprehended in consequence of the great advance in wages demanded by the men at the mines, has actually taken place. The employees at Messrs. Bell Brothers' Cliff Mines, Messrs. Morrison's Grange Mines, and Messrs. Robson's Crag Hall Mines gave notice a fortnight ago for an advance of 15d. and 3d. per ton, to take effect from the 1st instant, which if not conceded they should refuse to work. No arrangements having been made to that notice terminated on Tuesday morning, and about 1000 men refused to commence work. A mass meeting was held in the afternoon in a field, between Brotton and Saltburn-by-the-Sea, when resolutions were passed determining to hold out until their demand was granted. Messrs. Pease's men (the Upleatham Mines) have also given notice for an advance of 1d. per ton, which will expire on Saturday. Hopes of a speedy settlement of the disputes are entertained.

Last Saturday evening the inaugural dinner of the Cleveland Iron Trades Foremen's Association, a new society recently formed, was celebrated at the Corporation Hotel, Middlesbrough. Mr. Edward Williams, general manager of the Bolekow, Vaughan, and Company (Limited), the first honorary member, presided; Mr. Oubridge, the President of the association, occupying the vice-chair. There were about sixty gentlemen present. The usual toasts having been disposed of, Mr. Platts, the secretary, read the report, from which it appeared that the association had only been three and a half months in existence, numbered fifty-seven members, and had, after paying all expenses, a balance in hand amounting to 631. 6s. After thanking the Institute of Cleveland Engineers for supplying copies of their Transactions, and inviting their President to attend their meetings, the report thanked the honorary members who had joined them, and concluded by stating that two papers had been read—one by Mr. Thomas, "On the Process of Refining Iron for Puddling," and the other by Mr. Platts, "On the Force of Heat and Steam." The Chairman then proposed "Prosperity to the Cleveland Iron Trades Foremen's Association"—an association which seemed to him to contain the germs of much good, and the able Chairman pointed out the objects of the society—to meet together for the purpose of communicating to each other special knowledge. The Vice-Chairman responded, and gave "The Engineering and Iron Trades," to which Mr. George Neesham, of the Clay Lane and South Bank Works, responded. Other toasts were afterwards given.

The usual meeting of the delegates from the different collieries comprised in the Durham Miners' Mutual Benefit Association was held at the Market Hotel, Durham, on Saturday, Mr. Isaac Parks, Trinidad, in the chair. There were 22 collieries represented, embracing about 5000 members, or between 500 and 600 more than at the last meeting. The receipts were 621. 5d., from which 61. 9d. current expenses was deducted, and after 551. was placed to the association account in the bank there remained in the treasurer's hands 19s. 8d. Mr. John Richardson, agent to the association, intimated that he had received a letter from Mr. A. McDonald, president of the Miners' National Association, in which that gentleman requested to be informed correctly what the uniform feeling was amongst the miners of the county of Durham with reference to the annual blinding. The delegates then addressed the meeting successively on the question, the system being a denuded without exception as a great evil, and highly detrimental to the welfare of the miners of the county of Durham. It was afterwards agreed that Mr. Richardson be authorised to notify this opinion to Mr. McDonald, and that as soon as this association can command a position to cause the annual bond to be dispensed with it will use its utmost endeavours to terminate the present obnoxious system of blinding in the county of Durham.

COLLIERIES REJOICINGS AT THORNEY.—About 200 workmen were entertained to dinner by the owners of Thorney Colliery, to celebrate the cutting of the Five Quarter Seam at the company's new winning at Wheatley Hill. The operations at the new winning, which has been sunk in an entirely virgin field of coal in the Original Hartlepool Colliery Company's extensive royalties (which include Thorney and Ludworth Collieries) have been in operation for some time past, and the Five-Quarter seam (3 ft. 11 in. thick) was reached a few days ago, the success of the new undertaking causing the greatest joy to the workmen and tradesmen resident in Thorney, from the prospect of increased employment and prosperity thus opened up.

TRADE OF THE TYNE AND WEAR.

Feb. 3.—The Coal Trade continues, on the whole, pretty steady, and the prospect is certainly encouraging. The Thorney Coal Company, a most enterprising body of gentlemen, who have struggled forward through many difficulties, appear now to have surmounted those trials, and their efforts are about to be crowned with success. They have put down two new shafts at a point near Wingate, and have cut the Five-quarter coal seam, its thickness being nearly 4 ft., and of excellent quality. As a large tract of coal lies here, which can now be worked most advantageously by those new shafts, a prosperous career is before this company, and the coal is to be got with all possible dispatch. A large output may be expected, as two large winding-engines are in course of erection, and great rejoicings have taken place in the district. A few days ago a dinner was given to a number of the workmen and agents by the owners of the colliery, on account of the fortunate winning of the coal.

The arrivals in the Tyne have been very limited, and the harbour has got tolerably clear of shipping again, but there has been a fair amount of business done during the week. The tone of trade is much better than it has been for seasons back at this time of the year. On the Wear the London rates are up to 7s. 6d. per ton. There are also several orders in the market for French ports; Dieppe, 81.; Charente, 121.; St. Malo, 101. 10s.; St. Nazaire, 121. 10s.; and Fecamp, 81. Coal freights to the Mediterranean remain about the same—Alexandria, 201.; Malta, 141.; Naples, 181.; Genoa, 181. On the Tees there is little change in the state of trade.

During the week there has been sold in Middlesbrough more than 80,000 tons of pig-iron. In the Finished Iron Trade and Shipbuilding there is nothing new to report—all the branches are good. There have been two new blast-furnaces blown in this week. In the North of England there are 123 blast-furnaces blowing. The Coal and Coke Trade of South Durham is now very brisk, and the collieries on the west side of Newcastle are improving. At Walbottle the trade

is much better than it has been for some time, and another pit is to be commenced there shortly; the coal produced here is a well-known good house coal, sold mainly in the London market. A strike has taken place at the Widdrington Colliery. This is a new steam coal colliery near Morpeth, and a deal of discontent has been shown by the hewers for some time, as they are not satisfied with the manner in which the tubs are required to be filled. This dissatisfaction has at length culminated in the whole of the hewers striking, and the colliery is entirely stopped. Efforts have been made by the owners to compromise the matter, but as yet without success, and summonses have been taken out for six of the men, who will be brought before the magistrates shortly.

Fan Ventilation continues to progress rapidly. A large fan—the largest, we believe, yet constructed—is to be started at one of the collieries of Lord Lonsdale, near Whitehaven, this day. The diameter of this fan is 40 ft., and it is expected, of course, to put a very large quantity of air into circulation. A statement of the performances of this fan, and also that of several others, will shortly be given. A large fan is to be started this day at the works of Lord Lonsdale, near Whitehaven. This fan is 40 ft. in diameter, and another is in course of construction for the Usworth Colliery, in Durham, the dimensions of which are to exceed all previous fans. The diameter is to be 45 ft., and width 12 ft. An account of the performance of these fans in this district will shortly be given in the Journal.

A man was killed, and two boys severely injured, at the Monkwearmouth Colliery, under peculiar circumstances, on Saturday afternoon. Wm. Arnold, a back overman, was passing along the engine-road when a set of tubs was passing along, and unfortunately there were two ways in the place, he got on to the line in which the tubs were moving, and they knocked him down, and owing to his exertions to free himself some timber was drawn, when the roof fell. The poor man was killed, and two boys who were near were also much injured by the falling roof.

NORTH OF ENGLAND MINING INSTITUTE.—A general meeting of members will be held on Saturday, at which the business to be brought forward is various and very important. A large number of new members are to be elected, being gentlemen connected with mines, iron works, &c., in various parts of England, and also the Continent. The number of members continues to increase most rapidly, and the society prospers in every way. It must also be noticed that the new President is most indefatigable in the discharge of his onerous duties. The report of the committee appointed to consider the proposed connection between the Wood Memorial Hall and the library of the Literary and Philosophical Society having been approved of by the council will be submitted to the meeting. This report deals with important questions—"The arrangements for the Wood Memorial Hall being now completed, and as accommodation can be made for the reception of from 15,000 to 20,000 volumes, it is proposed that an agreement be entered into between the Mining Institute and the Literary and Philosophical Society, so that the above space may be made mutually advantageous." It is proposed to place the present books belonging to the Mining Institute, consisting of 500 volumes, in this hall, and also that not less than 500, per annum be spent in the extension of this library, provided the Literary and Philosophical Society expend a similar sum for scientific works. Also that all works of a scientific character, and all proceedings of learned societies, belonging to the Literary Society, shall be kept in the same hall; and shall, together with the library of the Mining Institute, be under the charge of the librarian of the Literary and Philosophical Society. Thus a library will be formed which must prove of the utmost value to all connected with mining and mechanical science in the district.

The papers to be read and open for discussion are—Mr. N. R. Griffith "On the Flintshire Cannel Seam." Mr. G. Fowler's papers, "On a Method of Abstracting Explosive Gas from Coal Mines," &c., and "On the Method of Working Coal by Long Wall." The discussion on Mr. T. J. Bowick's paper "On the Mountain or Carboniferous Limestone District of the North of England" is postponed, on account of Mr. Bowick's absence from home. A full report of the proceedings will be given in next week's Journal.

REPORT FROM SCOTLAND.

Feb. 2.—There has been little change in Pig-Iron during the week, the business done being principally in warrants laid on the market by weak speculators, whose finances could not bear further strain. This has brought prices to their natural level, and supply and demand may now be said to hold prices in equipoise. The trade, however, is healthy, and more than an average business is taking place from week to week, although the shipments of the last eight days are a few hundred tons under those of the corresponding week of 1869, the totals being for the week just ended 9320 tons, against 9835 tons last year; but then there is in the shipments for the month to date an increase of not less than 13,500 tons over the same period in 1869, and also an increase of fully 1100 tons in the imports from Middlesbrough. The stocks in Connal and Co.'s and Canal Company's stores amount to 342,357 tons, against which warrants are in circulation for 332,300 tons, which is an increase of over 9000 tons. The number of furnaces in blast is 129, with miners' wages ranging from 4s. to 4s. 8d. per day. We had a very quiet market at the opening of this week, with business at 55s. 6d. cash, and 56s. one month; and yesterday there was no improvement, warrants for a month being 56d. per ton cheaper. The market opened firm this morning, at 55s. 6d. cash, but afterwards gave way, and 55s. 5d. and 55s. 3d. cash and 55s. 8d. and 55s. 7d. a month was accepted, closing buyers 55s. 3d. cash, and 55s. 7d. a month, sellers requiring 1d. per ton more, No. 1, g.m.b., 56s. 6d.; No. 3, 54s. 3d.; Coltness and Gartsherrie, 63s.; Langloan and Summerlee, 60s.; all Eglinton brands, 56s. 6d., all No. 1 iron. The makers of Finished Iron have, generally, large orders on hand, which they are running off, in some instances, at remunerative, if not losing, prices; but those of them who are open to new engagements can place their orders to advantage. The report by a local contemporary, that certain houses (which they quote) had raised their prices 5s. a ton since last week, is without foundation.

We noticed two or three weeks ago that a "nominal" advance had been made by the leading firms, but we have only heard of one instance of its being acted on, the advance being still nominal. First bars are, therefore, 71. 10s. to (nominal) to 71. 15s.; second, 71. 7s. 6d. to 71. 10s.; plates, 91. 10s. to 91. 12s. 6d., and in great demand. Pipes in request, and founders busy. The Blochairn Company are said to have advanced their puddlers 5 per cent., and the Coatbridge firms gave notice to their hands last Saturday that they would receive 5 per cent. advance at next fortnightly pay; but the men have in no way indicated that they acquiesce in the compromise, and will surely pocket the advance in the meantime, and when opportunity occurs "strike" for more. The proprietors of the Glasgow and Motherwell Iron Works—the largest malleable works in Scotland—are presently singled out as the victims of the strike, and the men at the other works are working to aliment them and keep them idle. And is this a combination of circumstances that the Legislature are about to seriously legalise and sanction by the power of law? If this were once seriously done, it would simply render capital the butt of Trades Unions, and legalise a form of disorganisation which, in all its past history, can be shown to have yielded nothing but the bitterest fruit to even the workmen themselves. And are we warranted in expecting now that its fruits will become not only changed, but reversed? The Scotch ironmasters have dealt liberally with their puddlers, who now, finding that they have heavy contracts on hand, are resolved to have an increase of wages, though their employers should all go into the bankruptcy list. Is this wise?

The Coal Trade is rather active for inferior descriptions, and good shipments are being made from the whole of the Scotch ports, but the better classes of house coal are only in limited demand, at weakening prices. During the week from the Scotch ports the following shipments were made:—23,545 tons, against 18,340 tons in the corresponding week last year. Bings are again beginning to accumulate, and laden wagons are filling up the sidings at not a few pits—no satisfactory indication of a continuity of briskness. The miners, however, are being instructed that 4s. 6d. a day is not a wage they should be content with, and they are being told this story by those who are reputed to be quite devoted to their interest, while they are merely counselling them to act in such a way as will enhance the value of the iron scrip they hold, and which they cannot hold long at a loss. It is a pity the miners are so easily gulled, and that they cannot rule their conduct by what is taking place before their own eyes. The miners have held meetings here, and in the Upper Ward, for the purpose of agitating for an advance, but no new feature marked the proceedings.

We regret to report the stoppage of Messrs. Scott and Gilmour, coalmasters, Wishaw, with liabilities estimated at 100,000.

Mr. John Watson, coalmaster, has all but completed the opening out of a new seam of coal, of excellent quality, near his pits at Motherwell. The Monkland Iron and Steel Company has also commenced operations on their newly-leased coal fields on the estate of Tannoch-side, near Airdrie. These fields extend to fully 500 acres, and consist of three seams—Pigotshaw, main, and splint and gas

coal. The machinery is very effective, consisting of two horizontal engines, of 100-horse power each, with appliances for checking the machinery so as to ensure against accident; and the pits are ventilated by peculiarly-constructed fans driven by steam power.

From the Clyde shipyards there were a few launches last month, but principally for Scotch owners. Yesterday afternoon there was launched a screw steamer of 2500 tons, with handsome fittings, for the Atlantic passenger trade. She was named the *Caspian*, is 342 ft. long, 37½ ft. broad, 25 ft. deep, and is built to highest class at Lloyd's. Her engines are direct-acting inverted cylinders, of 450-horse power. There have been several contracts again entered for vessels during last week—one for the Inman line, two for the River Plate trade, and three for the Suez Canal, &c. Everything betokens a good trade in ship-building this season.

It is in report, *sub rosa*, that the Caledonian dividends will be at the rate of 3½ per cent., carrying forward about 8000l.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Feb. 3.—Rather more orders have been given out for ordinary makes of merchant iron during the week, but the works are as yet by no means fully employed, and few makers are securing an advance of 1l. per ton over the prices of last quarter. There is, however, a disposition to look forward hopefully, and the ready response to the proposal of the Russian loan of 12,000,000l. shows that capital is forthcoming if a good security can be offered. Pig iron continues firm, the general advance in price tending to relieve South Staffordshire of the sharp competition from other districts. Mr. David Rose has completed very extensive alterations at the Red Hill furnaces, which he purchased some time ago. He has raised them 15 ft., and has provided means for utilising the waste heat, following the course adopted with so much success in the Cleveland district.

The question of the drainage of mines is one of the most important which is occupying the attention of the proprietors in both colliery districts of Staffordshire. Mr. R. H. Wynne, who was appointed at a meeting of owners a short time ago to report on the subject so far as it affects North Staffordshire, presented his report at a meeting on Monday, at Stoke-upon-Trent, at which his father, the Inspector of Mines, presided. The report by no means tended to diminish the apprehensions which had been entertained. He pointed out that the water was gradually rising, and was likely shortly to overflow into a large number of mines. He estimated that it would require 78000l. to reduce the water for the first year, and 60000l. a year afterwards, which would include expenditure of carrying off the surface water, and preventing what was raised by the pumps descending into other mines towards which the surface sloped. He, however, suggested that by putting down a fresh powerful engine at the lowest point, at a cost of upwards of 80000l., the annual cost might be reduced to 40000l., and he proposed that this should be raised by a tonnage rate on all the coal, slack, and ironstone raised, which he calculated would amount to from 4d. to 6d. per ton. The amount of the cost, however, appeared to stagger those present, and decision was deferred. If in any district voluntary agreement for such an object is possible it would be in North Staffordshire, where the mines belong to a few great proprietors, but there are great difficulties in getting all to agree when there is a chance that those who stand out may get the advantage of their neighbours' expenditure for nothing. It is strange that no one seeks to obtain an Act enabling a body to be formed, consisting of the colliery owners of the district, with power, say, on the assent of the owners of three-fourths of the minerals being worked, and after due enquiry before a Government officer, so to avoid tyranny by great proprietors, to levy a sale on the minerals raised, for the purpose of draining both the surface and underground ponds. In South Staffordshire (as was explained in last week's Journal), an earnest attempt is being made to carry out drainage by arrangement.

A meeting of the committee of the South Staffordshire Industrial and Fine Arts Exhibition was held on Thursday at Wolverhampton. It was stated that the net profits, which it was at first supposed would have been 12000l., were only 8750l., after all the expenses had been paid. It was proposed to raise this sum to 15000l., and with the addition of 10000l., which it was anticipated could be obtained from the Government to purchase the present School of Art, which is deeply in debt, for a School of Art and a School of Science. Hitherto the Wolverhampton School of Art, oppressed by a heavy debt, has been with difficulty kept open, and it would be an admirable permanent result of the Exhibition of last year if it could be secured for the two purposes indicated. But to raise 7000l. is not an easy task, though it is a mere trifle to the expenditure for trifling luxuries in the wealthy district which surrounds the town.

The meeting of the South Staffordshire and East Worcestershire Institute of Mining Engineers, convened for Monday, promises to be an important and interesting one. Several gentlemen of considerable influence in the district are to be ballotted for as members, and the papers include—"Remarks on part of the Coal Field of Fife, N.B., Illustrated with Sections," by Mr. Walter Neas, M.E., of Fife; "A Description of Messrs. Craig and Bidder's Patent Electro-Magnetic Lock for Safety-Lamps," by the Patentes; "A Description of Extensive Explorations in the Disturbed and Altered Thick Coal under the Bowley Hills, at Earl Dudley's Pit, Oakham, Illustrated by an Horizontal Section, 30 ft. long," by Mr. R. Latham, M.E., Dudley; "A Description of New Sinkings and Explorations against the Great Western Boundary Fault of the South Staffordshire Coal Field at the Earl of Dudley's No. 3 and 7 Pits, Himley Colliery, and Section of the Trial Sinking at Compton, Enville," by Mr. George Spruce, M.E., Pennsett. In addition to the reading of the papers, there will be an exhibition of diagrams, new safety-lamps, and other matters connected with mining, and Mr. Johnson has arranged to bring before the members a scheme for proving and developing the district lying east of the eastern boundary fault at West Bromwich and Handsworth. A concession of the whole of the Earl of Dartmouth's lands, comprising 1700 acres, having been obtained, a trial sinking will be made a little north of Smethwick. Plans and particulars of this concession and scheme for proving the mines have been forwarded to each member, that there may be a thorough discussion at the meeting.

The Cannock Chase coal field, the development of which is comprised within the history of the last twenty years, presents a scene of enterprise which goes far to justify the prediction that the "Marquis's Kitchen Garden" will become the Black Country of the future. There are at present fifteen shafts in active operation, producing nearly 800,000 tons of coal a year, but this yield is on the verge of an increase which will swell the aggregate to the enormous yearly produce of a million tons.

HEAVY PENALTY FOR A MINE OFFENCE.—At the West Bromwich Police-court, Mr. Isaac White was summoned, at the instance of Mr. Baker, Government Inspector, for that he, being the agent of a certain colliery at Hill Top, called the Ebenezer Colliery, did, on Oct. 16, neglect to observe one of the general rules in force in the colliery—that an adequate amount of ventilation should be constantly produced in all coal mines or collieries, to dilute and render harmless noxious gases to such an extent that the working places of pits, travelling roads, &c., should, under ordinary circumstances, be in a fit state for working and passing through, contrary to the statute. Several witnesses were called, and it was stated that the agent named a man was fatally injured in consequence of defendant's negligence. The Stipendiary considered the case clearly proved, and fined the defendant 20l. and costs.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

Feb. 4.—Business continues moderately good in both North and South Derbyshire, so that the iron works and collieries are kept well going. For House Coal there is a very brisk demand, so much so that some of the leading firms are scarcely able to keep pace with the requirements of their customers. Steam Coal is not in such good request as it has been, the export trade having fallen off considerably. The great event of the week has been the opening of the branch line of railway from Sheffield to Chesterfield. Not only will the line be the means of giving facilities for the mineral traffic, but it will also be the means of developing the resources of a very important district, in which there are valuable beds of coal and ironstone. Amongst the other advantages derived by the opening of the line is an improved passenger service, so that the journey from Sheffield to London is performed in less than four hours.

There is no change in the Iron and Coal Trades of South Yorkshire. At Thornecliffe the effect of the late attack on the houses of the non-Unionists has been to cause a very large number of men to apply for work during the last week or ten days, so that the firm will shortly have as many hands at work as are required. There has been no disturbance during the week, but a large body of police and the military are kept on the ground. To-day (Friday) the prisoners charged with rioting and assault will be remanded at Wakefield until Monday. They will then be conveyed to Barnsley, where every precaution is taken to ensure their safe custody. As it is expected that all the collieries in the district will be set down on Monday, the number of soldiers of the 22d Regiment, who acted so admirably on Friday, is to be doubled, and a very large addition is to be made to this police force. This evening the Mayor of Barnsley issued a proclamation calling upon the peacefully disposed inhabitants to keep within their houses on Monday, so as to avoid any danger. It is expected that there will be a collision, and probably an attempt at rescue, so that, to all intents and purposes, the town of Barnsley on Monday next will be in a state of siege, the military being concentrated at one or two points commanding the avenues leading to the town.

Fresh arrests are expected to be made to-night and on Saturday, so that the greatest excitement prevails in Barnsley and the district, and speculation is rife as to what Monday next will bring forth. In the west district the only men out of those of the firm alluded to in last issue, Messrs. Bowers, as the leaders appear to be desirous of fighting the collieries one at a time.

The Bessemer patent expires in a few days, and there is some little excitement in the iron trade. But Mr. Bessemer is far too clever a man to allow 120,000l. a year, which he gets from royalties alone, to pass out of his hands. Recently he has invented a process by which the waste material that could not be converted into steel shall be converted. As this waste was about 30 per cent., it is manifest that he will be able to undersell all other makers, even though they use his first patent without paying for it. In other words, he will compel them to use his new patent—that is, to continue paying the royalty. Mr. Bessemer is now a man of enormous wealth, and the conservatory which he has just erected at his seat is probably the finest in the world. Yet it is little more than 20 years since he was a working engineer in North London who, all his friends declared, would never do anything for himself, because he was always muddling away his time and money in experiments. For some years he experimented on the making of steel. His problem was how to get the superfluous carbon out of the pig-iron, and yet retain the proportion required. For some time he succeeded only partially, the steel being of uncertain quality, because the proportion of carbon was of uncertain amount. At last Mr. R. Mushet suggested that the easiest plan was to get rid of all the carbon, and restore the required quantity afterwards. He had been wise enough to take out a patent, but had forgotten that after a provisional registration for six months it was necessary to pay 50l. In this way Mr. Bessemer got possession of the patent, and made arrangements with Mr. Mushet, with which the latter gentleman was not wholly satisfied. He subsequently set up works of his own at Coleford, in the Forest of Dean, where he now produces the titanic steel.

TAMPERING WITH A SAFETY-LAMP IN THE OAKS COLLIERY.—At the Barn-Joy Court-house, Alfred Hodgson was charged with violating the 33d bye-law at the Oaks Colliery, on Oct. 29. William Ward, a miner, said he went into the defendant's working place on the day named, and found the light in the defendant's lamp burning to a height of 1½ or 2 inches. It had burnt the top of the gauze. Mr. Minto, the underground viewer, produced the gauze, which must have been made red-hot. The prisoner absconded at the time, and only just been apprehended. In answer to the magistrates, Mr. Minto said he did not press for a conviction. The bench fined the defendant 20s. and costs, in all 2l. 6s. 6d.; or one month's imprisonment in default. They stated that had the case been pressed, they would have committed him to prison unconditionally.

REPORT FROM MONMOUTH AND SOUTH WALES.

Feb. 3.—Gradually, though slowly, the more hopeful prospects in the Iron Trade alluded to in previous reports are being realised. As far as the rail department is concerned, there is no doubt entertained but that there will be heavy orders in the market in the course of a short time, in addition to those already given out, but which are yet unexecuted. It may be said that not since the great panic of 1866 has the home trade been in anything like a healthy state, and even last year, although there was a large amount of improvement in the foreign demand, the purchases of home buyers did not increase in a like proportion. It is very satisfactory, therefore, to be in a position to announce that this year is likely to witness a revival in home industry, and indications on all sides point to a demand for railway iron considerably in excess of that of the last three years. There are no very important undertakings to be carried out, it is true, but the supplies that will be required to keep the existing roads in order will be large, because hitherto many of the companies have not been in a position to relay their lines as they might have desired to do, in consequence of the difficulty experienced in raising the necessary capital. In bars the market is quiet, and this district finds much competition from the second and third-class houses of Staffordshire; who, although they have a nominal official list of prices, are selling in almost every instance below the quoted rates. In plates there is more doing, with the prospect that as the year advances there will be a decided expansion in the trade. Since last report there has been scarcely any change to note in foreign requirements. Advances from Russia are highly favourable, the success of the new loan rendering it certain that the new network of railways will be the means of sending large orders to this country. The shipments on American account are about the same as usual, and are not expected to increase to any extent until the spring has fairly set in. There is no alteration to report in the enquiries from the other foreign markets.

There has been a considerable strengthening of the movement in the Tin-Plate Trade lately, and many of the makers are now not disposed to sell only on an advance of one shilling per box. Should tin remain at its present price, and the expected large orders arrive from the United States, there is a fair probability that the tin-plate trade will be attended with no mean degree of prosperity during the current year.

It is reported that lately there has been some slight slackening in the orders from several of the foreign markets for Steam Coal, which may perhaps be attributed to the fact that it is the commencement of a new year more than to any real falling off in the consumption. On the whole, however, the trade remains in nearly the same state as for some weeks past. House qualities command a ready sale, the shipments to the West of England and Irish markets being in excess of what they were this time last year. Quotations are firmer.

Some time since it was announced that at a meeting of Welsh ironmasters it had been decided to grant an advance at all the South Wales iron works, which was to take effect from and after the end of February. At several of the works intimation to that effect was given last Saturday, the men being informed that on and after the end of February their wages will be advanced generally. The announcement has given particular satisfaction throughout the district, and it is to be hoped that the position of the iron trade will be maintained in its flourishing condition, so that the employers will not find themselves under the necessity of retreating from the step announced.

The collieries of the district are again agitating for an advance in their wages, and meetings of representatives from various collieries have been held, chiefly those of the Rhondda Valley, and it was decided to make a formal application for a rise, and unless the same is granted it was hinted that a month's notice will be given.

A petition to wind up the Glyn Neath Steam Coal and Iron Company is to be heard by the Master of the Rolls, on Feb. 2.

The Bristol and South Wales Railway Wagon Company directors, in presenting their eighteenth half-yearly report and statement of accounts, congratulate the shareholders on the result of the business for the past half-year. From the revenue account it will be seen that there is a disposable balance of 8255l. 11s. 3d., after carrying 1855l. 11s. to the depreciation fund, being at the rate of 5 per cent. per annum on the cost of wagons lent on hire. Out of this balance the directors recommend a dividend should be declared at the rate of 10 per cent. per annum, and that the sum of 590l. should be carried to the contingent fund, leaving a balance of 540l. 16s. 3d. to be carried to the current half-year's account. The rolling stock now belonging to the company consists of 6131 wagons and carriages, being an increase of 416 during the half-year, after deducting 239 sold and redeemed.

It is satisfactory to find that the collieries belonging to the Powell's Duffryn Company have not been stopped at the expiration of the month's notice, as was once anticipated; but that work will be continued under the direction of the Messrs. Powell, pending the appeal to the House of Lords.

A collier named Thomas Thomas was this week brought before the magistrates at Pontypridd, and charged with opening his lamp in that part of the Ferndale Colliery expressly and plainly laid down in the rules as being exempt from the use of open lamps. He returned his lamp loose to the man in the lamp station, at the bottom of the pit. He was sentenced to three months' imprisonment, with hard labour.

MINERS' UNDERGROUND HAT CAPS,

MANUFACTURED FOR HOME AND FOREIGN MINES,

BY

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CAPTAIN ABSALOM FRANCIS,

GOGINAN, ABERYSTWITTH,

MINING AGENT, ENGINEER, AND SURVEYOR.

The great success which is attending the opening and working of the Mines in the counties of Cardigan and Montgomery, and the many properties placed at the disposal of Capt. ABSALOM FRANCIS, induces him to offer his services, either to ADVISE, INSPECT, REPORT, or SURVEY, for Mining Companies or private shareholders.

For terms, apply to Capt. ABSALOM FRANCIS, as above.

CWM DWYFOR COPPER AND SILVER-LEAD MINES.—

WANTED, ONE HUNDRED, or more, SHARES in this company.

Apply, stating lowest price, to "H. L. C." Pelham Club, Hanover-square, W.

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Metalliferous Mines and Mineral Estates in any part of the United Kingdom carefully inspected and reported upon. Upwards of twenty years' professional experience—ten years in North Wales. For several years past E. S. has devoted special attention to the formation of Slate Rock Veins and the development of Slate Quarries in general. Underground and Surface Plans, Sections, and Working Charts correctly executed.

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Having had Ten Years experience in the Mines, and Twelve Years on the Mining Market, is in a POSITION to GIVE ADVICE what to BUY and what to AVOID; also to transact business in any of the mines in the country. Mines inspected and reported on.

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THE MESSRS. VERCOE, PRACTICAL MINING ENGINEERS AND SURVEYORS, are always in a position to GIVE SOUND ADVICE on all the MINES in this DISTRICT, having lived in the locality for nearly five years, and being daily engaged in Mining Pursuits.

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37, SOUTH CASTLE STREET, LIVERPOOL,

Have the BEST and LATEST INFORMATION on all the LEAD MINES of WALES and the NORTH OF ENGLAND, and on all AMERICAN MINES, and are in a position to transact business in most of them at the most market prices.

Messrs. LISCOMBE and Co. issue monthly the "Liverpool Mining Circular," containing special information on all the leading Welsh Mines, which can be had on application.

LONDON AND COUNTY BANKING COMPANY.—

ESTABLISHED 1835.

Subscribed capital £2,500,000, in 50,000 shares of £50 each.

Paid-up capital £1,000,000. Reserve fund £500,000.

DIRECTORS.

NATHANIEL ALEXANDER, Esq., LORD ALFRED HERVEY.

THOS. TYRINGHAM BERNARD, Esq., WILLIAM CHAMPION JONES, Esq.

PHILIP PATON BLYTH, Esq., EDWD. HARBORD LUSHINGTON, Esq.

JOHN WILLIAM BURMES, Esq., THOMAS STOCK COWIE, Esq.

FREDERICK FRANCIS, Esq., JAMES MORLEY, Esq.

FREDERICK HARRISON, Esq., WILLIAM NICOL, Esq.

GENERAL MANAGER—William McKewan, Esq.

CHIEF INSPECTOR—W. J. Norfolk, Esq.

INSPECTORS OF BRANCHES—H. J. Lemon, Esq., and C. Sherring, Esq.

CHIEF ACCOUNTANT—James Gray, Esq.

SECRETARY—F. Clappison, Esq.

HEAD OFFICE,—21, LOMBARD STREET.

MANAGER—Whitbread Thomson, Esq.

ASSISTANT MANAGER—William Howard, Esq.

At the ANNUAL GENERAL MEETING of the proprietors, HELD on THURSDAY, the 3d February, 1870, at the City Temperance Hotel, Cannon-street Station, the following report for the year ending 31st December, 1869, was read by the secretary—

WILLIAM CHAMPION JONES, Esq., in the chair.

In presenting to the proprietors the balance-sheet of the bank for the half-year ending the 31st December last, the directors have the pleasure to report that, after paying interest to customers, and all charges, allowing for rebate, and making provisions for bad and doubtful debts, the net profits amount to £37,699 19s. 10d. This sum, added to £2225 17s. 7d., brought forward from the last account, produces a total of £39,925 17s. 5d.

The usual dividend of 6 per cent. for the half-year is recommended, together with a bonus of 2½ per cent., both free of income tax, which will amount to £285,000, and leave £3895 17s. 5d. to be carried forward to profit and loss new account. The pre-ent dividend to the June dividend will thus be 17 per cent. for the year 1869.

The directors have to announce the retirement of John Fleming, Esq., from the board, and the election of Edward Harbord Lushington, Esq., in his stead. The directors retiring by rotation are—Frederick Francis, Esq., Thos. Stock Cowie, Esq., and Frederick Harrison, Esq., who, being eligible, offer themselves for re-election.

The dividend and bonus (together £1 14s. per share), free of income-tax, will be payable at the head office, or at any of the branches, on and after Monday, the 14th instant.

BALANCE-SHEET OF THE LONDON AND COUNTY BANKING COMPANY

31st DECEMBER, 1869.

Dr.—Capital paid up £ 1,000,000 0 0

Reserve fund 500,000 0 0

Amount due by the bank for customers' balances, &c. £13,305,679 14 10

Liabilities on acceptances, covered by securities 2,068,856 17 11= 13,874,536 12 1

Profit and loss balance brought from last account 6,225 17 7

Gross profit for the half-year, after making provision for bad and doubtful debts, viz. 250,478 6 0

Total £17,131,240 16 4

Cr.—By cash on hand at head office and branches, and with Bank of England £ 1,995,538 14 3

Cash placed at call and at notice, covered by securities 1,846,023 16 1= £ 3,841,562 10 4

Investments, viz.—

Government and guaranteed stocks 1,370,628 0 7

Other stocks and securities 61,073 10 4= 1,431,701 10 11

Discounted bills and advances to customers in town and country 9,402,360 8 8

Liabilities of customers for drafts accepted by the bank, as per contra 2,068,856 17 11= 11,471,117 6 5

Freehold premises in Lombard-street and Nicholas-lane, freehold and leasehold property at the branches, with fixtures and fittings 241,342 4 4

Interest paid to customers 44,516 8 7

Salaries and all other expenses at head office and branches, including income tax on profits and salaries 101,101 0 1

Total £17,131,240 16 4

PROFIT AND LOSS ACCOUNT.

Dr.—Interest paid to customers, as above £ 44,516 8 7

Expenses, as above 101,101 0 1

Rebate on bills not due, carried to new account 17,291 0 0

Dividend of 6 per cent. for the half-year 60,000 0 0

Bonus of 2½ per cent. 25,000 0 0

Balance carried forward 8,895 17 5

Total £256,704 3 1

Cr.—Balance brought forward from last account £ 6,225 17 7

Gross profit for the half-year, after making provision for bad and doubtful debts 250,478 6 0

Total £256,704 3 1

We, the undersigned, have examined the foregoing balance-sheet, and have found the same to be correct.

(Signed) WILLIAM NORMAN, } Auditors.

R. H. SWAINE, }

London and County Bank, 27th January, 1870.

The foregoing report having been read by the secretary, the following resolutions were proposed, and unanimously adopted:—

1. That the report be received and adopted, and printed for the use of the shareholders.

2. That a dividend of 6 per cent., together with a bonus of 2½ per cent., both free of income tax, be declared for the half-year ending the 31st December, 1869, payable on and after Monday, the 14th inst., and that the balance of £3895 17s. 5d. be carried forward to profit and loss new account.

3. That Frederick Francis, Thos. Stock Cowie, and Frederick Harrison, Esqs., be re-elected directors of this company.

4. That William Norman, Richard Hinds Swaine, and Wm. Jardine, Esqs., be elected auditors for the current year.

5. That the thanks of this meeting be given to the board of directors for the able manner in which they have conducted the affairs of the company.

6. That the thanks of this meeting be presented to the auditors of the company for their services during the past year.

7. That the thanks of this meeting be presented to the general manager, and to all the other officers of the bank for the zeal and ability with which they have discharged their respective duties.

(Signed) W. CHAMPION JONES, Chairman.

The Chairman having quitted the chair, it was resolved, and carried unanimously:—

8. That the cordial thanks of this meeting be presented to Wm. Champion Jones, Esq., for his able and courteous conduct in the chair.

(Signed) WILLIAM NICOL, Deputy-Chairman.

Extracted from the Minutes.

(Signed) F. CLAPPISON, Secretary.

LONDON AND COUNTY BANKING COMPANY.—

Notice is hereby given that a DIVIDEND on the capital of the company, at the rate of SIX PER CENT. for the HALF-YEAR ending 31st December, 1869, with a BONUS of TWO AND A HALF PER CENT., will be PAID to the proprietors, either at the head office, 21, Lombard-street, or at any of the company's branch banks, on and after MONDAY, the 14th instant.

By order of the Board, W. MCKEWIN, General Manager.

21, Lombard-street, Feb. 4, 1870.

THE CHIVERTON AND PERRANZABULOE MINING DISTRICT.

JUST PUBLISHED, a neatly LITHOGRAPHED MAP of the

above district, showing the relative position of mines, all known lodes cross courses, &c.

Size of map, 3 feet 6 inches by 2 feet 6 inches. Price, coloured, mounted, and varnished, £1 1s.

Applications for copies to be addressed to Mr. R. H. BREWSTER, TRURO, or to WILLIAM BREWSTER, Plain-an-Gwarry, Redruth, Mine and Land Surveyor, Dranghtmen, Lithographers.—Dated Nov. 10, 1869.

TO BE SOLD, pursuant to an Order of the High Court of Chancery, made in the Cause "Miles against Evans," with the approbation of His Honour the Vice-Chancellor, SIR RICHARD MALINS, in One Lot, by Messrs. BARNARD, BAKER, and CO. (the One Lot being sold by the said Messrs. BARNARD, BAKER, and CO. as Auctioneers, in the County of Brecknock, on Tuesday, the 24th day of February, 1870, at Two for Three o'clock in the afternoon, the LEASEHOLD TIN-PLATE and IRON WORKS, known by the name of

THE LLANEELY FORGE

The works comprise STEAM ENGINES, ROLLING-MILLS, BLAST and PUDDLING-FURNACES, WATER-WHEELS, FORGE-HAMMER, FIRE-BRICK MILL, OFFICES, &c., and are held under a lease from the Trustees of the late Capel Hanbury Leigh, Esq., for the residue of a term of 21 years. Immediate occupation can be given, and may be viewed on application to the

Printed particulars may be obtained (gratis) of Mr. THOMAS MORGAN LLEW-
ELLIN, solicitor, Newport, Monmouthshire; of the auctioneer, Albion Chambers
Bristol; and at the place of sale; and in London of Messrs. THOMAS, WHITE,
and SONS, solicitors, No. 11, Bedford-row. H. PRICHARD, Catef Clerk.
THOS. WHITE and SONS, 11, Bedford-row, Middlesex

(Agents for Thos. Morgan Llewellyn, of Newport, in the county of Monmouth,
Vendor's Solicitor).
Dated the 3d day of February, 1870.

MONMOUTHSHIRE.
TO BE SOLD, pursuant to an Order of the High Court of
 Chancery, made in the Cause of "Miles against Evans," with the approba-

tion of His Honour the Vice-Chancellor, Sir RICHARD MALINS, in Two Lots, by Messrs. BARNARD, THOMAS, AND CO., the persons appointed by the said Judge, at the Westgate Hotel, Newport, in the county of Monmouth, on Tuesday, the 1st day of March, 1879, at Two for Three o'clock in the afternoon,
LOT 1.—All that LEASEHOLD FOUNDRY, with the manager's house, yard, and outbuildings, called

THE BRITANNIA FOUNDRY,
Situate at PONTYMISTER, in the Parish of RISCA, in the said County of
MONMOUTH.

The works comprise an ENGINE and BOILER-HOUSE, BLACK MILL SHED, BLACKSMITHS' SHOP, FITTING SHOP, PATTERN SHOP, MOULDING SHED, YARD, OFFICES, and RAILWAY SIDINGS, adjoining the Western Valley Railway, and are fitted with a STEAM-ENGINE CRANE PLANT.

and MACHINERY. The premises comprised in Lot 1 are held for the residue of a term of 99 years, from the 1st day of April, 1854, at the yearly ground rent of £25 8s., and are now let to Mr. John Edwards for a term of which about one year and a half are unexpired, at the yearly rent of £400.

LOT 2.—All that BUILDING called the FACTORY, together with the water-power thereto belonging, and the garden at the back thereof, in the occupation of Mr. John Morris Morgan, as yearly tenant, at the rent of £20. And also all those THREE COTTAGES near thereunto, with the gardens thereto adjoining.

now let to Mr. John Edwards, at the yearly rent of £24, under a lease of which about one year and a half are unexpired. The premises comprised in Lot 2 are held for a term of 99 years, from the 2d of February, 1853, at the yearly ground rent of £5.

Printed particulars may be obtained (gratis) of Mr. THOMAS MORGAN LLEWELLIN, solicitors, Newport, Monmouthshire; of Messrs. FUSSELL, PRICHARD, and SWANN, solicitors, Bristol; of the Auctioneers, Albion Cham-

THOMAS WHITE AND SONS, of 11, Bedford-row, in the county of

(Agents for Thomas Morgan Llewellyn, of Newport, in the county of
Monmouth, Vendor's Solicitor.)
Dated the 3d day of February, 1870.

THE CLOOSH LEAD MINE.

TO BE SOLD, OR LEASED, as may be agreed on, the above VALUABLE LEAD MINE, bearing a large quantity of heavy thunders

Prospectuses, with reports, plans, &c., may be seen at the MINING JOURNAL Office, 26, Fleet-street, London, E.C.

Office, 26, Fleet-street, London, E.C.

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FOREST OF DEAN, GLOUCESTERSHIRE.

HIGHLY IMPORTANT AND VERY VALUABLE IRON MINE.

TO BE SOLD, BY PRIVATE CONTRACT, all that extensive FREEHOLD MINERAL PROPERTY, comprising an area of upwards of 400 acres, and containing an abundant supply of HEMATITE IRON ORE, and

THE SOUTH WALES IRON MINE,

Situate near the western outcrop of the Forest of Dean Mineral Basin, about two miles from the town of COLEFORD, and in close proximity to the well-known Birmingham & Gloucester Railway.

The average yield in the adjoining mines is 11,000 tons per acre.
The facilities for transit are also very important.
Blues and carbonates may be had of Messrs. J. and T. BLANCH, Collieries

NORTH FIELD IRON WORKS, ROTHERHAM.

TO BE LET, OR SOLD, the NORTH FIELD IRON WORKS, adjoining upon the River Dun Navigation, with siding to the South Yorkshire branch of the Manchester and Sheffield Railway, comprising FORGE and PLATE TRAINS, MERCHANT MILL, ENDLESS TYRE MACHINE, BEND-

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TO BE LET, or Nineteen Years, with entry at Llammas next, the COAL FIELD OF CLUNY, in the parishes of KINGLASSIE and AUCHTERDERRAN, and county of FIFE, with the COLLIERIES' HOUSES, all as lately possessed by Messrs. LANDALE and BOYD, coal masters, with a trifling alteration in the marches, and with the exception of some of the houses formerly occupied in connection with the colliery.

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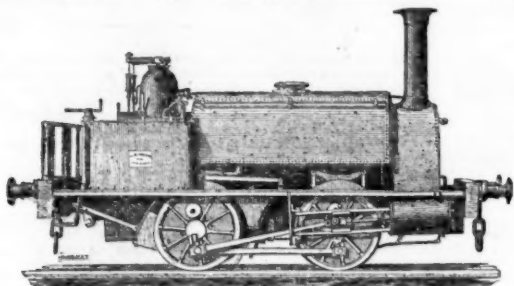
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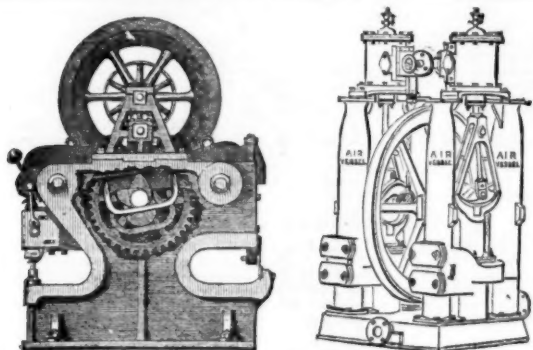
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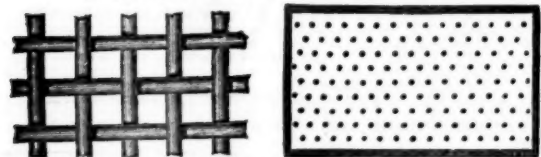
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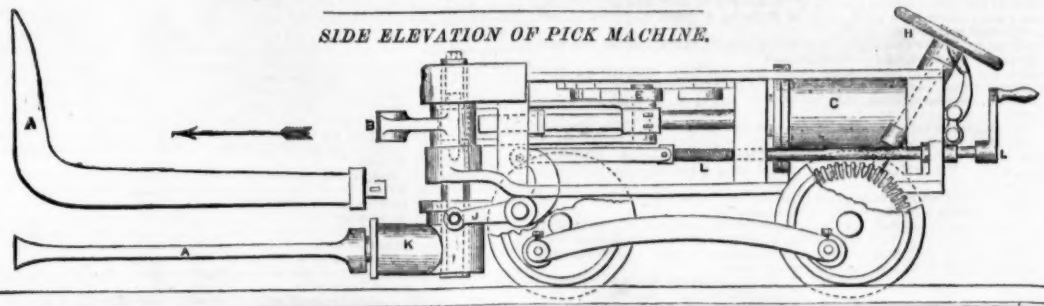
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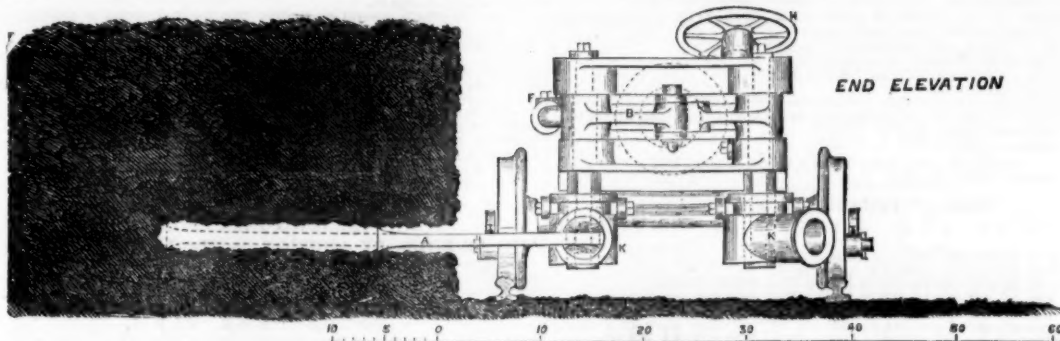
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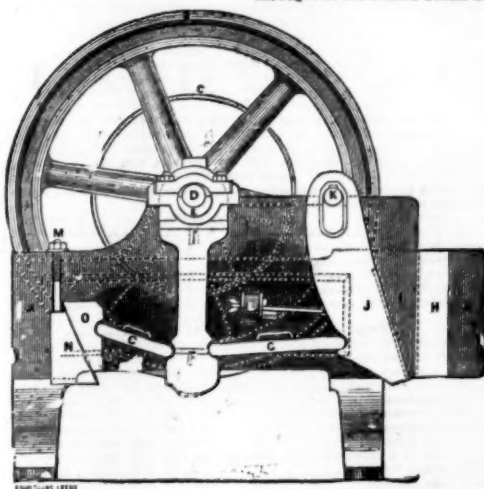
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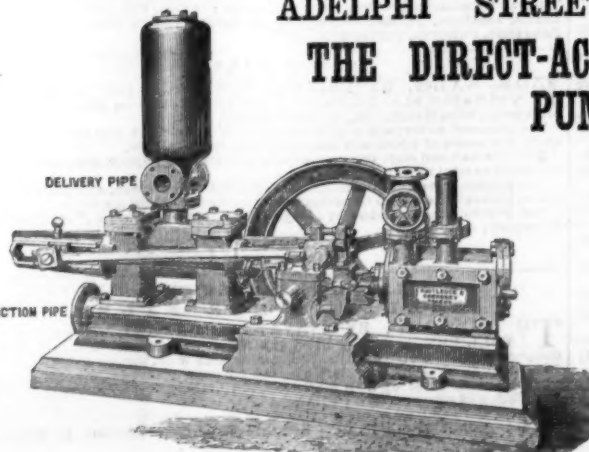
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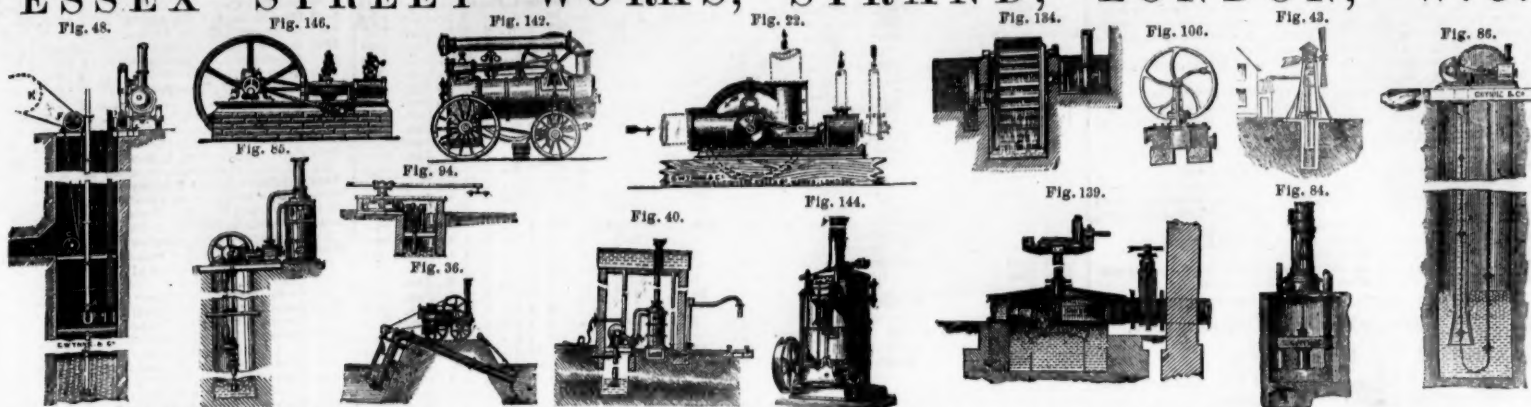


Fig. 144.—Vertical Engine, all sizes, from 2 to 20-horse power.
Fig. 146.—Horizontal Engine, from 4 to 100-horse power.
Fig. 142.—Portable Engine, from 2½ to 30-horse power.
Fig. 40.—Gwynne and Co.'s Combined Stationary Pumping Engine.
Fig. 139.—Turbine Water-wheel, from 1 to 300-horse power.

Fig. 22.—Combined Pumping Engine, all sizes, obtained Prize Medal, Paris Exhibition.
Fig. 85.—Deep Well Pumping Engine, all sizes.
Fig. 134.—Water-wheel Pumping Machinery.
Fig. 36.—Gwynne and Co.'s Patent Syphon Drainage Machinery.
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Fig. 86.—Chain Pump Pumping Engine.
Fig. 48.—Deep Mine Centrifugal Pumping Machinery.
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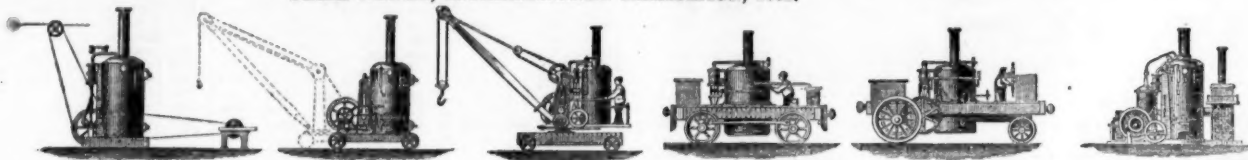


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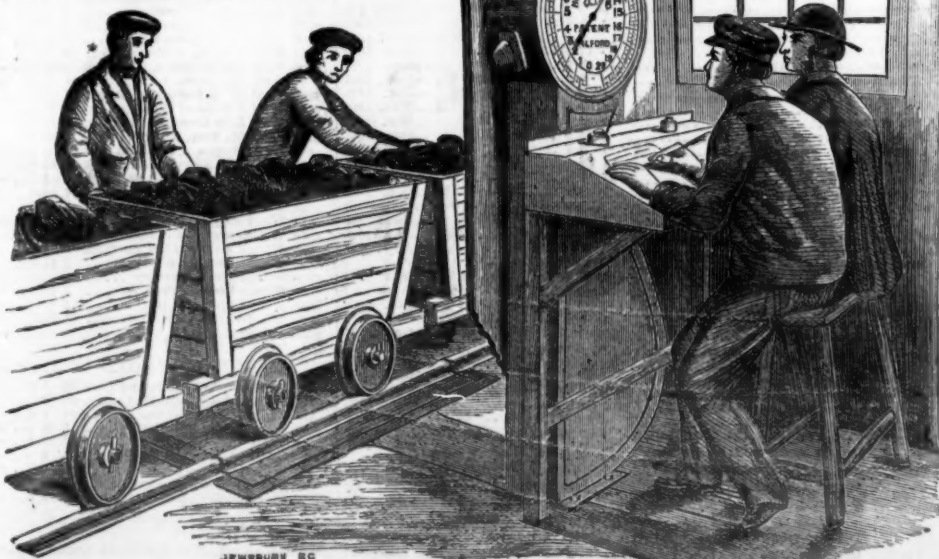
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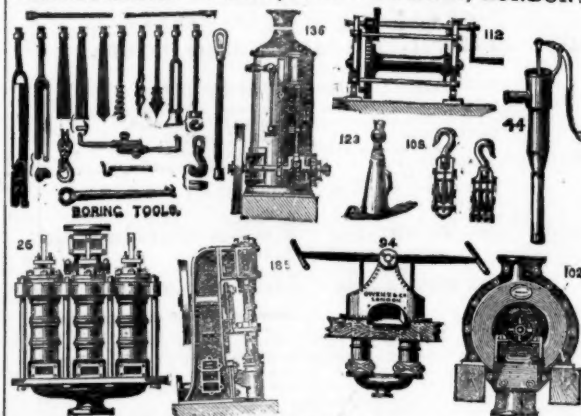
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